

DOCUMENT RESUME

ED 264 753

HE 018 926

TITLE Quality Control Study of the GSL Reinsurance System. Final Report.

INSTITUTION Advanced Technology, Inc., Reston, VA.

SPONS AGENCY Office of Student Financial Assistance (ED), Washington, DC.

PUB DATE 16 Sep 83

CONTRACT 300-80-0952

NOTE 246p.; For related documents, see HE 018 927-928.

PUB TYPE Guides - Non-Classroom Use (055) -- Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC10 Plus Postage.

DESCRIPTORS Accountability; Change Strategies; Check Lists; Data Processing; *Error Patterns; Evaluation Criteria; *Federal Programs; Flow Charts; Higher Education; *Loan Repayment; Needs Assessment; Problem Solving; *Program Administration; Program Evaluation; *Quality Control; Recordkeeping; Records (Forms); Reports; *Student Loan Programs

IDENTIFIERS *Guaranteed Student Loan Program

ABSTRACT

A quality control plan for the U.S. Department of Education's Guaranteed Student Loan (GSL) reinsurance process was developed. To identify existing errors, systems documentation and past analyses of the reinsurance system were analyzed, and interviews were conducted. Corrective actions were proposed, and a quality control checklist was developed to monitor adherence to written operating procedures. A functional analysis of the reinsurance system was also undertaken to provide a detailed assessment of the organizational setting. One product of the functional analysis was a detailed description of the document flows and the organizational interactions within the reinsurance process. Problems that were identified dealt primarily with: claims and collections units of the Division of Program Operations, data processing, and the Office of Financial Management Services. Each corrective action was assessed against evaluation criteria, including: cost, technological sophistication, and processing efficiency. In addition to identifying current problems and proposed corrective actions, the current system is outlined using flowcharts and explanations. Also provided are information on procedures, user instructions, and summary tables for conducting a quality control check on manual system functions. Claims and accounting forms are included. (SW)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

HE

ED264753

QUALITY CONTROL STUDY
OF THE GSL REINSURANCE SYSTEM
FINAL REPORT

Submitted to

Division of Quality Assurance
Office of Student Financial Assistance
U.S. Department of Education

Contract No. 300-80-0952

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

By

ADVANCED TECHNOLOGY, INC.
12001 Sunrise Valley Drive
Reston, Virginia 22091

September 16, 1983

HE 018 926

PREFACE

The Office of Student Financial Assistance (OSFA) of the Department of Education (ED) has contracted with Advanced Technology, Inc. of Reston, Virginia, and its subcontractor, Westat, Inc. of Rockville, Maryland, to conduct a three-year quality control project (Contract No. 300-80-0952). The focus of the project is on the Pell Grant Program, the second largest of the student aid programs, although other student assistance programs are also considered. The objective of Stage Three, Part Two, is to introduce methods of ongoing quality control into OSFA programs. The reports completed to date under Stage Three, Part Two, include:

Guaranteed Student Loan (GSL) Reinsurance System Specifications Report, March 30, 1983.

Quality Control in the Institutional Delivery of Student Financial Assistance, June 23, 1983.

Quality Control Study of the GSL Reinsurance System Final Report, September 16, 1983.

TABLE OF CONTENTS

	Page
PREFACE	i
EXECUTIVE SUMMARY	v
1.0 INTRODUCTION	1-1
1.1 Report Overview	1-1
1.2 Overview of the Reinsurance System	1-1
1.3 Project Goals and Methodology	1-4
1.4 Organization of the Report	1-5
2.0 FUNCTIONAL ANALYSIS	2-1
2.1 Introduction	2-1
2.2 Reinsurance Documents	2-2
2.3 Manual Processing	2-2
2.4 Automated Processing	2-14
2.5 Manual Processing Continued	2-17
2.6 1189-2 Automated Processing	2-17
2.7 OFMS Overview	2-31
2.8 Disbursement Process	2-31
2.9 Collections Process	2-31
2.10 Returned and Cancelled Checks	2-31
3.0 ANALYTIC FRAMEWORK	3-1
3.1 Introduction	3-1
3.2 Historical Policy Context	3-1
3.3 Current Policy Context	3-14
3.4 Evaluation Criteria	3-15
4.0 PROBLEM AREAS	4-1
4.1 Introduction	4-1
4.2 Problem Identification and Needs Assessment Methodology	4-1
4.3 Findings	4-4
5.0 CORRECTIVE ACTIONS	5-1
5.1 Introduction	5-1
5.2 Evaluation Methodology	5-1
5.3 General Issues in Designing Corrective Actions	5-3
5.4 Corrective Actions in DPO	5-5
5.5 Data Processing Corrective Actions	5-25
5.6 Corrective Actions in OFMS	5-59
6.0 CONCLUSIONS	6-1
APPENDIX A Current GSL Reinsurance System Specifications	A-1
APPENDIX B Quality Control Procedures for DPO and Supporting Materials	B-1

LIST OF EXHIBITS

	Page
EXHIBIT 1-1: OVERVIEW OF THE REINSURANCE PROCESS	1-3
EXHIBIT 2-1: 1189-1 FORM	2-3
EXHIBIT 2-2: 1189-3 FORM	2-4
EXHIBIT 2-3: 1189 FORM	2-5
EXHIBIT 2-4: 1189-2 FORM	2-6
EXHIBIT 2-5: SLPC MANUAL EDITS	2-7
EXHIBIT 2-6: DATA ENTRY KEYING EDITS	2-15
EXHIBIT 2-7: FILE LAYOUTS	2-18
EXHIBIT 2-8: ERROR MESSAGES	2-22
EXHIBIT 2-9: REPORT SAMPLES	2-24
EXHIBIT 2-10: SAMPLE OF COMPLETED 1166 FORM	2-28
EXHIBIT 2-11: OUTPUT OF O.E. FORM 1189-2 (COLLECTIONS)	2-29
EXHIBIT 2-12: SAMPLE OFMS ACCOUNTING REPORT	2-32
EXHIBIT 2-13: OFMS DISBURSEMENT REGISTER	2-34
 EXHIBIT 3-1: ANNUAL LOAN VOLUME AND PERCENT SHARE OF GSL PROGRAM FOR FISL AND GUARANTEE AGENCY COMPONENTS	 3-8
 EXHIBIT 5-1: STEPS IN A STUDENT AID PROCESSING SYSTEM	 5-4
EXHIBIT 5-2: COMPARISON OF DPO CORRECTIVE ACTIONS	5-8
EXHIBIT 5-3: REINSURANCE AGREEMENT STATUS REPORT	5-31
EXHIBIT 5-4: ADJUSTMENTS TO CLAIMS REPORT	5-32
EXHIBIT 5-5: STACOL UPDATE REPORT	5-33
EXHIBIT 5-6: EVALUATION OF DATA PROCESSING MARGINAL CORRECTIVE ACTIONS	5-34
EXHIBIT 5-7: POSSIBLE COMBINATIONS OF THE DATA ENTRY, EDITING, UPDATE, AND DATA BASE FILE ALTERNATIVES	5-37
EXHIBIT 5-8: SYSTEM DESIGN OPTIONS 1, 2, AND 3	5-38
EXHIBIT 5-9: SYSTEM DESIGN OPTION 4	5-39
EXHIBIT 5-10: SYSTEM DESIGN OPTIONS 5, 6, AND 7	5-40
EXHIBIT 5-11: SYSTEM DESIGN OPTION 8	5-41
EXHIBIT 5-12: SYSTEM DESIGN OPTIONS 9, 10, AND 11	5-42
EXHIBIT 5-13: SYSTEM DESIGN OPTION 12	5-43
EXHIBIT 5-14: CLAIMS RECORD WITH ADJUSTMENTS, NO AGGREGATE RECORDS	5-47
EXHIBIT 5-15: AGGREGATE CLAIMS RECORDS	5-48
EXHIBIT 5-16: COLLECTIONS RECORD	5-50
EXHIBIT 5-17: MANY-TO-MANY RECORD RELATIONSHIP	5-51
EXHIBIT 5-18: COMBINED CLAIMS/COLLECTIONS FILE	5-53
EXHIBIT 5-19: DESIGN OPTION ADVANTAGES AND DISADVANTAGES	5-54
EXHIBIT 5-20: COMPARISON OF DATA PROCESSING STRUCTURAL DESIGN OPTIONS	5-56
EXHIBIT 5-21: GUARANTEE AGENCY QUARTERLY REPORT	5-61
EXHIBIT 5-22: EVALUATION OF OFMS CORRECTIVE ACTIONS	5-66

LIST OF EXHIBITS
Continued

	Page
EXHIBIT A-1: REINSURANCE DOCUMENTS	A-2
EXHIBIT A-2: MANUAL PROCESSING	A-4
EXHIBIT A-3: AUTOMATED PROCESSING	A-6
EXHIBIT A-4: MANUAL PROCESSING CONTINUED	A-10
EXHIBIT A-5: 1189-1 AUTOMATED PROCESSING	A-12
EXHIBIT A-6: OFMS OVERVIEW	A-14
EXHIBIT A-7: DISBURSEMENT PROCESS	A-16
EXHIBIT A-8: COLLECTIONS PROCESS	A-18
EXHIBIT A-9: RETURNED AND CANCELLED CHECKS	A-20

EXECUTIVE SUMMARY

The general goal of this project is to develop a quality control plan for the Guaranteed Student Loan (GSL) reinsurance process. This plan includes three components:

- Prevention of potential error through quality control procedures
- Identification of existing error-prone functions
- Elimination of existing error through appropriate corrective actions.

In order to fulfill these quality control goals, the following activities were conducted during the project:

- Existing error was identified by
 - Reviewing past analyses of the reinsurance system from such entities as the General Accounting Office and the Department of Education's Office of the Inspector General
 - Analyzing systems documentation
 - Interviewing staff directly involved in the reinsurance process.
- Corrective actions were proposed that are based upon Advanced Technology's extensive experience in quality control, systems design, and student aid.
- A quality control checklist was developed to monitor adherence to written operating procedures and to measure error on a sample basis.

In addition, as an antecedent activity, a functional analysis of the reinsurance system was undertaken. The functional analysis provided a detailed assessment of

the organizational setting within which the quality control procedures and corrective actions must operate. For these procedures and actions to be effective, they must be consistent with the organizational environment of the reinsurance process.

FUNCTIONAL ANALYSIS

One product of the functional analysis was a detailed description of the document flows and the organizational interactions within the reinsurance process (Appendix A of the report). The document flows are summarized in Exhibit I.1.

Claims forms (1189, 1189-1, 1189-3) are submitted by guarantee agencies to the Student Loan Processing Center (SLPC), operated on a contract basis, which runs them through a series of manual edits. If the forms do not pass the edits (e.g., certain data elements are missing) they are returned to the appropriate agency. If they pass the edits, the data on the forms are keyed into the system and uploaded into the automated processing system. The automated system edits the data and updates the data base twice a week and produces three reports. The 1189 forms are sent to the GSL Claims Unit, which prepares a voucher. The voucher is routed through the Office of Financial Management Services (OFMS) to the Treasury Department, where a check is cut and mailed to the guarantee agency.

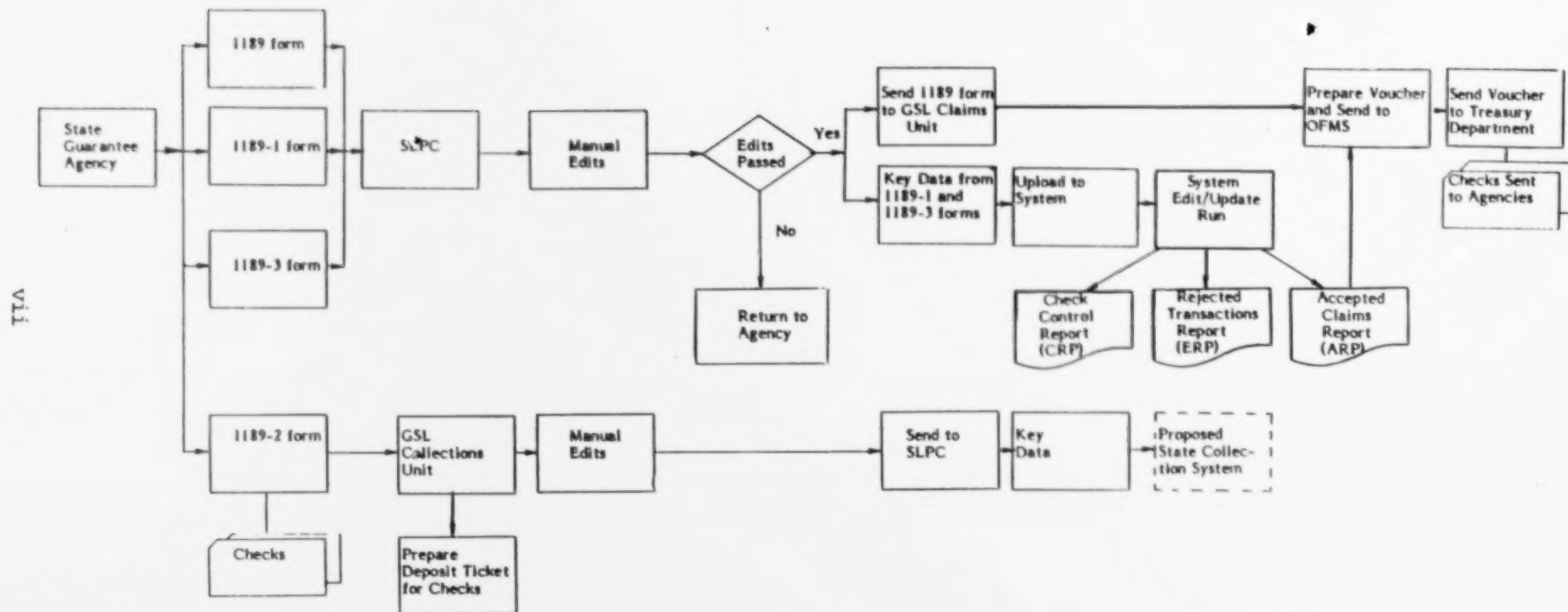
Collections forms (1189-2) and accompanying checks are sent directly to the GSL Collections Unit by the guarantee agencies, where a deposit ticket is prepared. The forms go through a manual edit and are sent to SLPC, where the data are keyed and maintained for use in a proposed state collections system.

PROBLEM IDENTIFICATION

The problems identified through the interviews, system documentation critique, and reports and audits review deal primarily with three components of the reinsurance system:

- Claims and Collections Units of the Division of Program Operations (DPO)
- Data processing system
- Office of Financial Management Services.

EXHIBIT I.1
SUMMARY OF DOCUMENT FLOWS



Deficiencies in the Claims and Collections Units of DPO generally fall into two areas:

- Procedures
- Staffing and resources.

Perhaps the paramount source of error in DPO is the lack of rigorous operating procedures and parallel quality control procedures in the Claims and Collections Units. In addition, no up-to-date procedures manual exists. Further, staff are not formally trained in how to effectively and accountably perform their duties. These are serious problems since the role of the Claims and Collections Units is to manage the day-to-day operations of the reinsurance system. As a result of the general absence of operating and quality control procedures, the following specific problems have resulted:

- Poor record keeping, including a lack of supporting documentation for adjustments and inconsistent verification of collections check amounts against 1189-2 forms and claims amounts against 1189 forms
- Possibility of duplicate payments
- No rechecks of staff computations on a formal basis, resulting in possible underpayments or overpayments
- Inefficient communication with OFMS.

The second general area of problems in the Claims and Collections Units of DPO is staffing and resources. Budget cuts and reorganization have reduced staff size, downgraded staff positions, and resulted in a loss in experience and expertise for the Units. Of particular importance has been the loss of senior-level management expertise, due primarily to staff turnover and downgrading of positions, and the lack of accounting training and knowledge among current staff. These are serious deficiencies given the rapidly increasing volume of claims and collections in the reinsurance process.

The reinsurance subsystem of the GSL data processing system is extremely limiting and considerably inferior to the current state-of-the-art in systems design. The various reinsurance processing problems include:

- Lack of a functioning state collections system
- Difficulty in reconciling collections from loan defaulters with claims at the Social Security number level
- Inability to distinguish between repurchases and collections in data gathering for the potential state collections system
- Inability to determine overpayments and underpayments from the Department of Education (ED) to guarantee agencies
- No on-line query capability
- Inability to correct a claim after entry
- Reports that do not meet user needs
- Inability to enter a claim for a second default after the initial defaulted loan was repurchased without artificially adjusting the data
- Lack of an automated interface among DPO, OFMS, and the Treasury Department.

OFMS is an integral actor in the reinsurance process. The problems affecting OFMS fall into four areas:

- Difficulty in accurately aging receivables
- Difficulty in calculating outstanding collections balances
- Inefficient communication with the Claims and Collections Units in DPO
- Inability to distinguish between principal and interest on collected funds.

CORRECTIVE ACTIONS

The project team designed a series of corrective actions that paralleled existing system problems. Each corrective action was assessed against the following evaluation criteria:

- Flexibility to adapt to policy changes
- Cost
- Cost-effectiveness relationship
- Technological sophistication

- Compatibility with delivery system redesign
- Processing efficiency (to evaluate automated data processing options only).

First, flexibility to adapt to policy changes was chosen as an evaluation criterion because of the history of legislative revision and amendment in the GSL program. Second, cost is included as a criterion because, given existing budget cuts throughout ED, an enhancement is only a realistic alternative if the implementation and operating costs are reasonable. Third, cost-effectiveness, or output per dollar expended, must be considered. In estimating cost-effectiveness, planners should consider such factors as whether the enhancement must be applied retroactively to maximize benefits and what the cost implications are in terms of staffing. Fourth, the technical sophistication of the corrective action should be weighed. Preferred enhancements should, to the extent possible, utilize state-of-the-art technology. Fifth, any proposed corrective action must take into account the current initiative in ED to evaluate the implications of delivery system redesign. Costly enhancements with a short life span may be inappropriate unless they produce significant immediate benefits or can be incorporated into a potential redesign effort.

In DPO, the most realistic and potentially far-reaching corrective actions are to implement new operating procedures, train staff in these procedures, develop a procedures manual, and design quality control procedures. These corrective actions will help to improve record keeping, provide audit trails, centralize the filing of supporting documentation, provide greater consistency in verifying collections check amounts against 1189-2 forms and claims amounts against 1189 forms, reduce duplicate payments, routinize rechecks of staff calculations resulting in fewer mispayments, and improve documentation for and communication with OFMS. As part of this project, quality control procedures to monitor the claims and collections process were developed. These procedures are included as Appendix B of this report.

Although these corrective actions will have a significant impact, they should be considered short-term enhancements. In the long term, OSFA should consider automating the operating procedures. It may be possible, for example, to use a minicomputer or microcomputer to assist in some of these procedures. Ultimately,

the manual procedures should be integrated into a redesign of the current data processing system.

A number of corrective actions are described in the area of data processing. These corrective actions fall into two categories: marginal and structural. The marginal corrective actions are temporary measures that will have significant immediate impact on alleviating particular problems. Marginal corrective actions proposed include addition of new data elements, introduction of new update and query capabilities, and improvements in reporting. All of these corrective actions should prove to be cost-effective. These actions, however, are not sufficient to remedy many of the major shortcomings of the reinsurance system. In the project team's opinion, correction can only be accomplished through structural redesign.

Such a redesign is proposed as a structural corrective action. The new design includes two data entry options, two edit options, two update options, and four data base file structure options. The options can be put together in 12 different combinations. All of the options were analyzed on the basis of cost, efficiency, and the other evaluation criteria, as well as in terms of the special problems they may present. A combination of these options which will best meet user needs, and at the same time be economical, is recommended. This combination includes on-line data entry and editing, batch updates, separate claims and collections data base files that are linked, and aggregate records.

In spite of the greater potential impact of the structural corrective actions, the project team realizes that implementation of a redesign is at least several years away. This assessment is based upon the high cost of redesign and the current budget tightening environment in ED. Given this assumption and the severity of existing problems, the recommended marginal corrective actions will be a worthwhile investment until redesign is possible, and these actions should be a high OSFA priority.

The third area of corrective actions relates to OFMS. The corrective action recommendations are the establishment of procedures to calculate outstanding collections balances, establishment of procedures to age reinsurance receivables, addition of claims interest to the 1189-1 form, and a one-time correction of ED balances using guarantee agency data. These recommendations will help

improve accounting procedures in OFMS. Although OFMS is outside the jurisdiction of OSFA, OSFA will benefit from these changes in terms of improved data and data access.

The project team believes that this program of short-term marginal enhancements and long-term structural corrective actions will successfully eliminate existing problems in the reinsurance system. In addition to increasing accountability and efficiency, it will also put OSFA at the forefront of the current delivery system redesign initiative.

SUMMARY

Current problems in the reinsurance system and proposed corrective actions are summarized in Exhibit I.2. This exhibit also briefly states the results and benefits of each corrective action, estimates the level of resources (high, moderate, or low) needed to implement the corrective action, and cites the section of the report that discusses each corrective action in detail.

EXHIBIT I.2

SUMMARY OF CURRENT PROBLEMS AND CORRECTIVE ACTION PROPOSALS

<u>Current Problem</u>	<u>Proposed Corrective Action</u>	<u>Results/Benefits of Corrective Action</u>	<u>Resource Estimation for Implementing Corrective Action</u>	<u>Report Reference</u>
General				
1. Lack of corrections capability	o Provide corrections capability in processing system (see data processing corrective actions)	Could make and track corrections in the system	Moderate	5.3
DPO				
1. Inadequate staffing and resources	o Increase number of staff handling claims and collections	Ease current processing burden, raise morale, decrease error, improve efficiency, decrease absenteeism and turnover	Moderate	5.4.1
	o Increase management expertise and experience of senior staff	Improve efficiency, decrease error	Moderate	5.4.1
	o Increase staff accounting expertise	Improve efficiency, decrease error	Moderate	5.4.1
	o Increase grade levels of staff positions	Raise morale, attract increasingly qualified staff as vacancies open	Moderate	5.4.1
	o Increase resources	Improve efficiency, decrease error	Low	5.4.1
2. Inadequate operational procedures and corrective action procedures	o Design formal operating procedures	Improve record keeping, provide audit trails, increase efficiency, decrease error	Low	5.4.2
	o Train staff in procedures	Improve record keeping, increase efficiency, decrease error	Low	5.4.2
	o Develop procedures manual	Improve record keeping, increase efficiency, decrease error	Low	5.4.2

EXHIBIT I.2

SUMMARY OF CURRENT PROBLEMS AND CORRECTIVE ACTION PROPOSALS (continued)

Current Problem	Proposed Corrective Action	Results/Benefits of Corrective Action	Resource Estimation for Implementing Corrective Action	Report Reference
3. Lack of quality control procedures	o Develop quality control checklist	Decrease error	Low	5.4.2
Data Processing (Marginal)				
1. Inability to make adjustments to the STACLM record at the claim number level	o Add new fields to the STACLM record	Could make and track adjustments to STACLM record	Moderate	5.5.1, 5.5.2
2. Lack of update capability in STACOL file	o Add adjustment fields to the STACOL record	Could track changes to the STACOL dollar amount fields	Moderate	5.5.1, 5.5.2
3. Lack of on-line query capability	o Use Data Management Language software package with IDMS	Users could make inquiries of IDMS files	Low	5.5.1, 5.5.2
4. Collections system does not distinguish between repurchases and regular collections	o Record repurchases on record used to capture 1189-2 line items by placing an "R" in the one-character field called "Source Code"	Could distinguish between repurchases and regular collections	Low	5.5.1, 5.5.2
5. Reports sequenced in an order not optimal for users	o Print ARP and ERP in schedule number order	Increase ease of locating claims for review	Low	5.5.1, 5.5.2
	o Run ERP for one schedule number followed by ARP for that schedule	Increase ease in adding accepted claims and rejected claims to verify against 1189	Low	5.5.1, 5.5.2
6. Current reports do not meet all user needs and are not efficiently distributed	o Develop new reports such as Adjustments to Claims Reports and STACOL Update Report	Provide additional data for monitoring the claims and collections system	Moderate	5.5.1, 5.5.2
	o Analyze user needs and route reports to interested users	Improve communications flow within OSFA and ED	Low	5.5.1, 5.5.2

EXHIBIT L.2

SUMMARY OF CURRENT PROBLEMS AND CORRECTIVE ACTION PROPOSALS (continued)

<u>Current Problem</u>	<u>Proposed Corrective Action</u>	<u>Results/Benefits of Corrective Action</u>	<u>Resource Estimation for Implementing Corrective Action</u>	<u>Report Reference</u>
Data Processing (Structural)				
1. Inability to make adjustments to 1189-1 or 1189-3 line items	o Redesign system	Positive or negative adjustments can be made at SSN or claim number level	High	5.5.3
2. No means of correcting data after entry	o Redesign system	Non-financial data may be corrected interactively	High	5.5.3
3. Poor audit trails	o Redesign system	Records maintained of all adjustments at the detail level, all payments, and all collections	High	5.5.3
4. Inability to enter a second claim on the same student without artificially altering data	o Redesign system	Keying structure will allow entry of claims after the first one for the same borrower	High	5.5.3
5. Collections cannot be reconciled against claims	o Redesign system	Provides integrated claims and collections so the two can be reconciled	High	5.5.3
6. No means of tracking funds due ED from agencies for reasons other than collections from borrowers	o Redesign system	Collections file structured to track such collections	High	5.5.3
7. Interfaces with other departments are manual	o Redesign system	Provide automated interfaces with OFMS and Treasury	High	5.5.3
8. Inadequate reporting	o Redesign system	Improved reporting including adjustment tracking, collections-claims reconciliation, and letter and notice generation	High	5.5.3

EXHIBIT L2

SUMMARY OF CURRENT PROBLEMS AND CORRECTIVE ACTION PROPOSALS (continued)

Current Problem	Proposed Corrective Action	Results/Benefits of Corrective Action	Resource Estimation for Implementing Corrective Action	Report Reference
OFMS				
1. Inability to calculate outstanding collections balance at any given time	o Combine data collected by DPO with data on Guarantee Agency Quarterly Report	Improve record keeping	Low	5.6.1
2. Inability to accurately age receivables	o Add a "date of default" column to 1189-1 form	Using date of default rather than date of claim payment will improve accuracy of record keeping	Moderate	5.6.2
3. Inability to separate principal and interest on claims	o Add column called "interest on amount of claim paid" on 1189-1 form	Improve record keeping, increase accuracy of claim payments	Low	5.6.3
4. Account balances in OFMS cannot be reconciled with accounts in OSFA	o Obtain data from guarantee agencies in several categories	Provide updated financial information, improve accuracy of data	High	5.6.4

1.0 INTRODUCTION

1.1 REPORT OVERVIEW

The Office of Student Financial Assistance (OSFA) of the Department of Education (ED) has contracted with Advanced Technology, Inc. to conduct a three-year quality control project. The initial focus of the project was on the Pell Grant Program. The project was broadened, however, to include the other major student assistance programs. As part of Stage Two of the Pell Grant Quality Control Project, Advanced Technology designed quality control procedures for manually processed interest payments under the Guaranteed Student Loan (GSL) Program. During Stage Three, Advanced Technology continued its work on quality control for GSL with this reinsurance task. The purpose of this task is to evaluate the existing system for processing reinsurance claims and collections and to recommend corrective actions to enhance information availability and quality control.

1.2 OVERVIEW OF THE REINSURANCE SYSTEM

Students are not currently required to present material assets as collateral when applying for Guaranteed Student Loans. Since lenders would be hesitant to participate in the program if their loans were not insured against default, the Federal government has designed a program to insure these loans. Insurance under the GSL Program can take one of two forms. Under the Federally Insured Student Loan Program (FISL), the Federal government directly reimburses lenders for 100 percent of lost principal and interest payments. Alternatively, lenders can be insured by state-authorized guarantee agencies, which are then reinsured by the Federal government. As of 1982, less than 5 percent of GSL loan volume was directly insured by the Federal government; the remaining 95 percent was insured

through state agencies and reinsured by the Federal government. The reinsurance process is the subject of this report.

In most reinsurance claims, the guarantee agency reimburses the lender, then the Federal government reimburses the guarantee agency for claims stemming from the death, disability, bankruptcy, or default of the borrower. The Federal government will consider reinsurance claims after payment is overdue by 120 days, and after the lender and/or guarantee agency has exercised due diligence in collection efforts. As long as default rates remain below statutory limits, guarantee agencies are reimbursed for 100 percent of lost principal and interest payments. Few exceed these limits; however, if default rates are too high, the Federal government will reimburse the guarantee agency for only 80 or 90 percent of the losses. States do not pay for this Federal reinsurance.

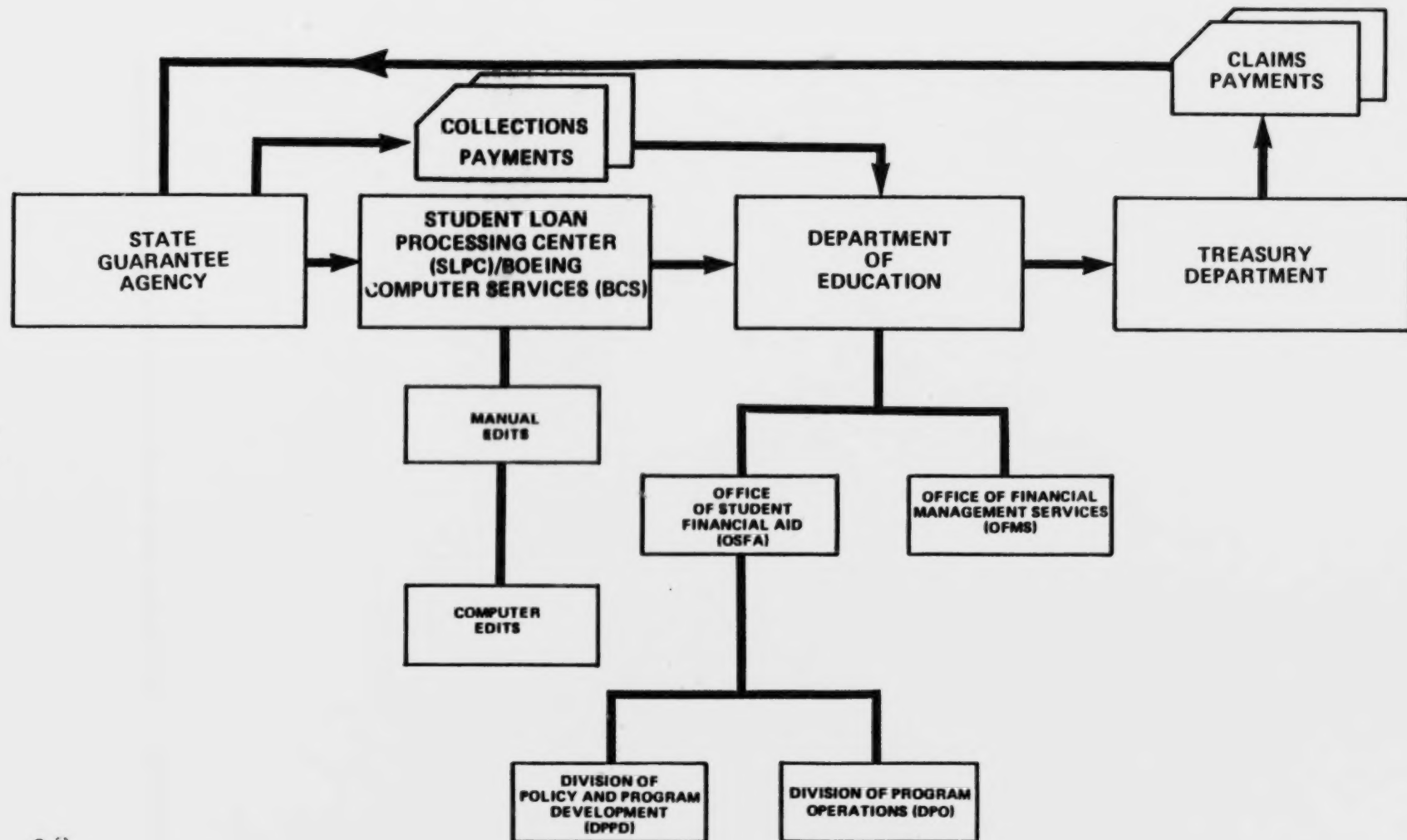
After a default, the guarantee agency becomes responsible for collecting outstanding loan balances. Agencies can cover the costs of collections efforts through any of the following mechanisms:

- State appropriations
- Revenue bonds
- Federally paid administrative cost allowances (up to 1 percent of annual loan volume)
- Insurance premiums deducted from loan value by lenders (up to 1 percent of loan value multiplied by the length of stay in school and a grace period)
- Retention of up to 30 percent of collections.

The retention of up to a 30 percent collections fee is intended to be an incentive to guarantee agencies to systematically collect on defaulted loans. The remaining 70 percent is returned to the Federal government.

Exhibit 1-1 illustrates the relationships between the major actors in the reinsurance process. As indicated, the guarantee agency, not the actual lender, is the entity that is reimbursed by the Federal government through reinsurance claims. To request claims payments from the Federal government, the agency must file a

EXHIBIT I-1
OVERVIEW OF THE REINSURANCE PROCESS



1-3

series of forms with the Student Loan Processing Center (SLPC) managed by Systems Management American (SMA) under a contract with ED. SLPC staff enter information from these forms into the GSL automated processing system. This system is maintained under a separate contract by Boeing Computer Services (BCS). Both SLPC and BCS perform edits on these data with the intention of maximizing their reliability. The claims forms are subsequently sent by SLPC to OSFA within ED. Guarantee agencies send a separate listing of collections made from borrowers in default directly to OSFA. These forms are then routed to SLPC by OSFA.

Within OSFA, two Divisions play a primary role in the reinsurance system. The Division of Program Operations (DPO) manages the day-to-day operations of the system and resolves special problems related to specific claims. The Division of Policy and Program Development (DPPD) determines policy related to the reinsurance system and projects trends concerning reinsurance claims, collections, and obligations. An actor outside of OSFA that plays a principal role in reinsurance is the Office of Financial Management Services (OFMS). OFMS receives information from DPO and DPPD and maintains an accounting system that reconciles collections, claims, and funding data. OFMS also transfers payment vouchers to the Treasury Department which, in turn, prepares claims checks and sends them to the guarantee agencies. The specific roles of these major actors are explained later in this report.

1.3 PROJECT GOALS AND METHODOLOGY

The general goal of this project is to develop a quality control plan for the GSL reinsurance process. This plan includes three components:

- Prevention of potential error through a quality control procedures checklist
- Identification of existing error-prone functions
- Elimination of existing error through appropriate corrective actions.

This approach to quality control is called the PIE concept, although the temporal sequence of the components is actually:

- First, identify existing error.
- Second, having identified error-prone functions, design corrective actions to eliminate the error.
- Third, once existing sources of error are identified and eliminated, design a mechanism to prevent future error.

In order to fulfill these quality control goals, the following activities were conducted during the project:

- Existing error was identified by
 - Reviewing past analyses of the reinsurance system from such entities as the General Accounting Office (GAO) and ED's Office of the Inspector General (IG)
 - Analyzing systems documentation
 - Interviewing staff directly involved in the reinsurance process.
- Corrective actions were proposed that are based upon Advanced Technology's extensive experience in quality control, systems design, and student aid.
- A quality control checklist was developed to monitor adherence to written procedures and measure error on a sample basis.

In addition, as an antecedent activity, a functional analysis of the reinsurance system was undertaken. The functional analysis provided a detailed assessment of the organizational setting within which the quality control procedures and corrective actions must operate. For these procedures and actions to be effective, they must be consistent with the organizational environment of the reinsurance process.

1.4 ORGANIZATION OF THE REPORT

Following Section 1.0, Introduction, Section 2.0 of the report describes the functional analysis of the reinsurance process. Section 3.0 explains the analytic framework and evaluation criteria used to identify error-prone points and corrective actions. Section 4.0 examines the problem areas in the current reinsurance process. Section 5.0 proposes corrective actions for many of the problems existing in the reinsurance system including discussion of the quality control checklist. Section 6.0

presents the conclusions of the study. Two appendices are included in the report. Appendix A provides a specification of the current system using flowcharts accompanied by abbreviated explanations. It is a companion to the narrative explaining the functional analysis in Section 2.0 and can also stand alone as a resource document providing a roadmap of system flows, document flows, and internal agency interfaces for the reinsurance process. Appendix B presents procedures, user instructions, and summary tables for conducting a quality control check on manual system functions.

2.0 FUNCTIONAL ANALYSIS

2.1 INTRODUCTION

In order to identify existing problem areas and potential bottlenecks in the reinsurance process and subsequently recommend corrective actions, the project team must have a thorough understanding of the specifications of the current system. This section reports the results of a functional analysis of the reinsurance process. The functional analysis specified the actors in the process and their roles and relationships.

The discussion in this section parallels the information contained in Appendix A, which provides a shorthand version of the system specification using flow diagrams and a bulleted summary format. Since this section and Appendix A are complementary, the narrative will make references to the appropriate flow charts and text in the appendix. Appendix A can also stand alone as a resource document providing ED staff with a roadmap of system flows, document flows, and internal agency interfaces. This information is not currently available in one source. It can help managers better understand the reinsurance process, increase efficiency, and reduce fraud.

In order to clearly display reinsurance system procedures through a series of flow charts in Appendix A, the reinsurance process was broken down into substeps. To be consistent with the appendix, this section uses these substeps as subsection headings. These substeps are:

- Reinsurance documents
- Manual processing
- Automated processing
- Manual processing continued

- 1189-2 automated processing
- OFMS overview
- Disbursement process
- Collections process
- Returned and cancelled checks.

2.2 REINSURANCE DOCUMENTS (See related flowchart and summary in Appendix A.1)

State guarantee agencies submit four forms in the reinsurance system. Three relate to the claims process and one to the collections process. Concerning claims, the 1189-1 form (see Exhibit 2-1) is used to request reinsurance payments on defaulted loans which still may be collectable from the borrower. The 1189-3 form (see Exhibit 2-2) is also used to make claims for reinsurance, but on non-collectables resulting from death, disability, or Chapter 11 bankruptcies. Along with these forms, states also submit to the Federal government a summary form, the 1189 (see Exhibit 2-3). The line items on this form are summaries of the 1189-1 and 1189-3 documents. All these forms are sent to SLPC in Norfolk, Virginia, which is operated on a contract basis.

Once a claim has been paid on a defaulted loan, the guarantee agency is still responsible for attempting to make collections on the loan. Any money collected is reported on an 1189-2 form (see Exhibit 2-4) and sent, along with a check, to the GSL Collections Unit in DPO. The agency may retain up to 30 percent of the collection as an administrative fee. The 1189-2 form is also used to indicate defaulted loans which have been repurchased.

2.3 MANUAL PROCESSING (See Appendix A.2)

Upon receipt at SLPC, all 1189-1, 1189-3, and 1189 forms are time stamped, entered into a control log, and grouped so that all 1189-1 and 1189-3 forms are attached to the corresponding 1189 form. If an 1189 is missing, the entire set of forms is returned to the guarantee agency. Manual edits are then performed according to the specifications in Exhibit 2-5. As part of the edits, totals on the

BEST COPY AVAILABLE

EXHIBIT 2-1
1189-1 FORM

GUARANTEE AGENCY (CODE) (NAME)		CLAIM NO.
STATE	REPORT FROM (YR., MO., DAY)	TO (YR., MO., DAY)

DEPARTMENT OF EDUCATION
OFFICE OF STUDENT FINANCIAL ASSISTANCE
WASHINGTON, D.C. 20202

FORM APPROVED
OMB 91540-9108
EXP. 2/84

GUARANTEE AGENCY REQUEST FOR REIMBURSEMENT
UNDER AGREEMENT FOR FEDERAL REINSURANCE

No claim may be paid unless a completed application form has been received -
PL 89-329 as amended, Sec 4281(2)(C).

PLEASE READ INSTRUCTIONS BEFORE PREPARING THIS DOCUMENT.

PLEASE READ INSTRUCTIONS BEFORE PREPARING THIS DOCUMENT.														
	(1) NAME OF BORROWER (LAST, FIRST, AND MIDDLE INITIAL)	(2) SOCIAL SECURITY NUMBER	(3)	(4)			(5) LENDER ID NUMBER	(6)			(7) INTER- EST RATE	(8) AMOUNT DISBURSED TO STUDENT	(9) TOTAL CLAIM PAID	(10) PRINCIPAL AMOUNT OF CLAIM PAID
			SEE CODES BELOW CODE	DATE	DATE OF DISBURSEMENT	NO.		DAY	YEAR					
										NO.				
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

SCHEDULE NO.

COLUMN (3) CODES

- 1. DEFAULT ----- DATE CONDITION OF DEFAULT AROSE
- 2. BANKRUPTCY ----- DATE BORROWER ADJUDICATED A BANKRUPT
- 3. DEATH ----- DATE LENDER NOTIFIED OF DEATH
- 4. DISABILITY ----- DATE LENDER NOTIFIED OF APPROVAL BY ED

COLUMN (4) CODES

16 TOTAL THIS PAGE 5
17 TOTAL ALL PAGES 5
LINE 17 MUST AGREE WITH LINE 2,
COLUMN (3) SUMMARY SHEET, ED 1189.

PAGE
OF PAGES

BEST COPY AVAILABLE

EXHIBIT 2-2
1189-3 FORM

U.S. GOVERNMENT PRINTING OFFICE 1982 - 384-579

GUARANTEE AGENCY (CODE)	(NAME)	PAGE
		OF PAGES
STATE	REPORT FROM (MONTH, DAY, YEAR)	TO (MONTH, DAY, YEAR)

DEPARTMENT OF EDUCATION
OFFICE OF STUDENT FINANCIAL ASSISTANCE
WASHINGTON, D.C. 20202
GUARANTEE AGENCY REQUEST FOR
REIMBURSEMENT ON DEATH AND DISABILITY

FORM APPROVED
OMB 41800-0109
EXP. 6/84

PLEASE READ INSTRUCTIONS BEFORE PREPARING THIS DOCUMENT.

No claim may be paid unless a completed application form has been received—PL89 329 as amended, Sec 429(2)(C).

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
NAME OF BORROWER (LAST, FIRST, AND MIDDLE INITIAL)	SOCIAL SECURITY NUMBER	C D E	DATE MO. DAY YEAR	LENDER ID NUMBER	DATE OF DISBURSEMENT MO. DAY YEAR	INTER- EST RATE	AMOUNT DISBURSED TO STUDENT	AMOUNT OWED BY BORROWER
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
CLAIM NO.	FOR ED USE ONLY VOUCHER NO.		COLUMN (3) CODES 1. DEATH 4. DISABILITY 7. BANKRUPTCY	16 SUBTOTAL THIS PAGE	5			
				17 TOTAL LINE 16, PAGE	5			
				TOTALS LINES 16 + 17 MUST AGREE WITH LINE 4.				
				18 COLUMN (3) OF SUMMARY SHEET, ED FORM 1189.	5			

EXHIBIT 2-3

1189 FORM

U.S. GOVERNMENT PRINTING OFFICE 1982-384-882

DEPARTMENT OF EDUCATION
OFFICE OF STUDENT FINANCIAL ASSISTANCE
WASHINGTON, D.C. 20202

GUARANTEE AGENCY REQUEST FOR REIMBURSEMENT FOR CLAIMS PAID

PLEASE READ INSTRUCTIONS
BEFORE PREPARING THIS
DOCUMENTFORM APPROVED
O.M.B. NO. 1840-0108
EXP. 5/84

NO CLAIMS MAY BE PAID UNLESS A COMPLETED APPLICATION FORM HAS BEEN RECEIVED PL. 89-329, SEC. 429 (2)(C)

SUMMARY SHEET

GUARANTEE AGENCY (UD)		NAME			
CLAIM NUMBER		REPORT FROM (MONTH, DAY, AND YEAR)		TO (MONTH, DAY, AND YEAR)	
ITEM		NUMBER OF CLAIMS (1)	AMOUNT (2)	TOTAL AMOUNT (3)	FOR ED USE ONLY (4)
1	AMOUNT OF REINSURANCE DUE FROM ED (ED FORM 1189-1)	A DEATH CLAIMS	\$		
		B PERMANENT AND TOTAL DISABILITY	\$		
		C BANKRUPTCY	\$		
		D DEFAULT	\$		
2	TOTAL OF COLUMN (2) LINE ITEMS 1A, 1B, 1C, AND 1D, MUST AGREE WITH AMOUNT SHOWN IN COLUMN (1) LINE ITEM 1B, ED FORM 1189-1.			\$	
3	AMOUNT OWED FOR DEATH AND DISABILITY (ED FORM 1189-3)	A DEATH	\$		
		B DISABILITY	\$		
4	TOTAL OF 3A AND 3B (MUST AGREE WITH AMOUNT SHOWN IN COLUMN (5) LINE ITEM 1B, ED FORM 1189-3)			\$	
5	TOTAL CLAIMS (TOTAL LINE ITEMS 2 AND 4)			\$	
6	ADJUSTMENTS FROM PREVIOUS REQUESTS (EXPLAIN ON SEPARATE SHEET)			\$	
7	NET PAYABLE BY U.S. DEPT. OF EDUCATION			\$	
8	NET PAYABLE TO U.S. DEPT. OF EDUCATION			\$	

I HEREBY CERTIFY THAT THE ABOVE AMOUNTS ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND CONFORM WITH
REGULATIONS OF THE U.S. SECRETARY OF EDUCATION. I UNDERSTAND THAT ANY PAYMENT I RECEIVE FROM THE U.S. DEPT.
OF EDUCATION IS SUBJECT TO RECONCILIATION AND ADJUSTMENT, WHERE NECESSARY.

SIGNATURE OF OFFICER	TYPED NAME AND TITLE	DATE OF APPLICATION FOR REIMBURSEMENT CLAIM
----------------------	----------------------	---

CLAIM NUMBER	SCHEDULE NO.
--------------	--------------

ED FORM 1189, 8/81

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

**EXHIBIT 2-4
1189-2 FORM**

DEPARTMENT OF EDUCATION
OFFICE OF STUDENT FINANCIAL ASSISTANCE
WASHINGTON, D.C. 20202

**GUARANTEE AGENCY REPORT OF RECOVERIES ON CLAIMS
PAID UNDER FEDERAL REINSURANCE**

PLEASE READ INSTRUCTIONS
BEFORE PREPARING THIS
DOCUMENT

FORM APPROVED
OMB # 1845-0118
EXP. 9/84

NO CLAIMS MAY BE PAID UNLESS A COMPLETED APPLICATION FORM HAS BEEN RECEIVED - PL. 89-329, SEC 428 (2)(C)

GUARANTEE AGENCY (JOB)		(NAME)			
STATE		PAGE			
(1)	(2)	(3)	(4)	(5)	
NAME OF BORROWER (LAST, FIRST, AND MIDDLE INITIAL)	SOCIAL SECURITY NUMBER	COLLECTIONS RECEIVED		80 PERCENT OF AMOUNT RECEIVED	
		DATE RECEIVED	AMOUNT RECEIVED		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
I HEREBY CERTIFY THAT THE ABOVE PAYMENTS ON REINSURED LOANS BY THE DEPT. OF EDUCATION REPRESENT THE TOTAL RECOVERIES DURING MONTH _____ YEAR _____		18	SUBTOTAL THIS PAGE	\$	\$
		19	TOTAL FROM LINE 20 OF PAGE _____	\$	\$
		20	TOTAL (LINES 18 AND 19)	\$	\$
SIGNATURE OF OFFICER		TYPED NAME AND TITLE		DATE SIGNED	

EXHIBIT 2-5
SLPC MANUAL EDITS

MANUAL EDIT SPECIFICATION FOR O.E. 1189

<u>ITEM</u>	<u>ITEM NAME</u>	<u>EDITING INSTRUCTIONS</u>
	Guarantee Agency Code	Must be present; check validity against G.A. code numbers.
	Guarantee Agency State	Must be present.
	Name (G.A.)	Must be present.
	Report From and To	Must be present and prior to current date.
1	Amount of Reinsurance due from O.E.	Must be present if O.E. Form 1189-1 is attached.
2	Total of Columns	Must be present if O.E. Form 1189-1 is attached.
3	Amount Owed for Death & Disability	Must be present if O.E. Form 1189-3 is attached.
4	Total of Columns	Must be present if O.E. Form 1189-3 is attached.
5	Total Claims	May be blank.
6	Adjustment Amount	Must be present if there are adjustments.
7	Net Payable by U.S.O.E.	Must be present.
8	Net Payable to U.S.O.E.	May be blank.
	Signature of Officer	Must be present.
	Typed Name and Title	May be blank.
	Date of Application for Insurance Claim	May be blank.

EXHIBIT 2-5
SLPC MANUAL EDITS (Continued)

MANUAL EDIT SPECIFICATION FOR O.E. 1189-1

<u>ITEM</u>	<u>ITEM NAME</u>	<u>EDITING INSTRUCTIONS</u>
	Guarantee Agency Code	Must be present. A six (6) digit number in the range of 999701-999800. If missing, look up number and fill in.
	Name	Must be present (Guarantee Agency Name).
	State	Must be present.
	Report To and From	Must be present and prior to current date.
1	Name of Borrower	Must be present. Last, first and middle initial.
2	Social Security Number	Must be present. Nine (9) digit number in the range of 001-00-0000 through 728-00-0000.
3	Code	Must be present. May be 1, 2, 3, 4, 5, 6, 7. If it comes in as a code 5, change to 3. If it comes in as a code 6, change to 4.
4	Date	Must be present. MMDDYY. Must be prior to current date.
5	Lender ID Number	Must be present. Six (6) digit number in the range of 800000 through 899992. If missing, look up the code in the lender's book. Use attached documentation for additional lender information.
6	Date of Disbursement	Must be present. MMDDYY. Must be prior to current date.
7	Interest Rate	Must be present. One (1) digit number.
8	Amount Disbursed to Student	Must be present. Figure in dollars and cents.
9	Total Claim Paid	Must be present. Figure in dollars and cents.
10	Principal Amount of Claim Paid	Must be present. Figure in dollars and cents.
11	80% of Paid Principal	May be blank.

EXHIBIT 2-5
SLPC MANUAL EDITS (Continued)

MANUAL EDIT SPECIFICATION FOR O.E. 1189-1

If the items in Columns 1-7 are missing or incomplete, try to obtain the information from other attached documentation. If the items cannot be determined, either call the Guarantee Agency for the information or reject. For Columns 8-11, reject the form to the Guarantee Agency, if any items are missing or incomplete.

Ditto marks are acceptable or are to be inserted if not present. Separate the 1189-1 Forms from the 1189-3 Forms within a given claim number and place the 1189-1 Forms in front of the 1189-3 Forms. Do not assign new page numbers.

EXHIBIT 2-5
SLPC MANUAL EDITS (Continued)

MANUAL EDIT SPECIFICATION FOR O.E. 1189-3

Follow the same instructions as for O.E. Form 1189-1, with one exception:

There is no Column 10 or Column 11.

EXHIBIT 2-5
SLPC MANUAL EDITS (Continued)

REINSURANCE LOG
O.E. FORM 1189

After edit has been completed, fill out Reinsurance Log using these specifications:

<u>ITEM</u>	<u>DESCRIPTION</u>
Reference	Leave blank.
Claim Number	Starting with 001, sequentially.
State Abbreviation	Two alpha letters of acceptable abbreviation.
State Code Number	Three (3) digit number found on front of Form 1189.
Date of Document	The date document was signed by Loan Officer. Found in bottom right hand corner of 1189.
Mail Room Date	Date that is stamped on the back of the document.
Received in Claims	Current date.
Cumulative Number	Found in Column one (1), line two (2) of 1189.
Amount of Request	Amount of Line 7 on Form 1189.
Default Number	Found in Column one (1), line one (1) of 1189.
Default Amount	Found in Column two (2), line four (4) of 1189.
Bankruptcy Number	Found in Column one (1), line three (3) of 1189.
Bankruptcy Amount	Found in Column two (2), line three (3) of 1189.
Death and Disability Number (1)	Found in Column one (1), line one (1), a and b total.
Death and Disability Amount (1)	Found in Column two (2), line one (1), a and b total.

EXHIBIT 2-5
SLPC MANUAL EDITS (Continued)

REINSURANCE LOG
O.E. FORM 1189

<u>ITEM</u>	<u>DESCRIPTION</u>
Death and Disability Number (3)	Found in Column one (1), line three (3), a and b total.
Death and Disability Amount (3)	Found in Column two (2), line three (3), a and b total.
Adjustments	Leave blank.
Date	Your initials under Approved.

EXHIBIT 2-5
SLPC MANUAL EDITS (Continued)

CONTROL SLIP
O.E. FORM 1189-1 and 3

<u>ITEM NAME</u>	<u>EDITING INSTRUCTIONS</u>
Claim Number	1-3 G.A. Code 4-5 Financial Year 6-7 00 Constant 8-10 Claim number assigned from log.
Guarantee Agency Code	Enter same number used in claim number 1-3.
Guarantee Agency State	Two letter abbreviation.
Schedule Number	Three digits from log.
Type of Payment	Leave blank.

Place all other documentation including the O.E. Form 1189 in a folder and place the claim number already obtained on the flap preceded by the state abbreviation and hold until control documents return from keying.

When you receive five (5) claims which make up a schedule, then send through Data Entry.

summary form are compared to those on the 1189-1 and 1189-3. SLPC staff try to resolve discrepancies through a telephone call to the guarantee agency. If this is not possible, the forms are returned to the agency. Following the edits, five claims are batched to form a schedule, assigned a schedule number, and sent to data entry. Following entry, 1189 forms are sent to the Claims Unit in DPO. The 1189-1 and 1189-3 forms are retained at SLPC.

State agencies typically send collections to the Collections Unit at DPO approximately twice a month. 1189-2 forms and accompanying checks go first to the cashier who assigns the 1189-2 a schedule number. Unit staff then perform a manual edit for completeness on the 1189-2, log in the forms, and record the amounts submitted and retained. At this point, the 1189-2 forms are sent to SLPC for data entry.

2.4 AUTOMATED PROCESSING (See Appendix A.3)

As claims data are entered, SLPC performs a series of on-line data entry edits (see Exhibit 2-6). A file of borrower level 1189-1 and 1189-3 transactions is then generated and uploaded to the automated data processing contractor. The contractor updates the reinsurance data base twice a week. During these runs, an index of claim numbers is provided by the State Claims (STACLM) data base; edits are performed to check claim number, lender number, and guarantee agency/state; and Social Security number-disbursement date combinations are checked for uniqueness to prevent payment of duplicate claims. The latter procedure should greatly reduce duplicate claims which were a major problem area before the automated system was running.

In addition, data are loaded into Table Number 15, which is used to drive the reinsurance trigger mechanism. This mechanism calculates the percent of outstanding loans in each agency that are in default. As the percentage reaches certain predetermined levels, the Federal government's reimbursement rate decreases. If the default rate is less than 5 percent, the reimbursement rate is 100 percent. If the default rate is equal to or greater than 5 percent but less than 9 percent, reimbursements decline to 90 percent of a claim. If the default rate climbs to 9 percent or above, reimbursement declines to 80 percent. This trigger mechanism

EXHIBIT 2-6
DATA ENTRY KEYING EDITS

There will be one header record per batch control. This is a 155 character record created from the batch control ticket. All fields must be present and valid or the entire batch is rejected to OE II. The header will appear as follows:

1 - 2	Transaction Code	"02"
3 - 12	Claim Number	Cannot be zeros
13 - 60	Filler	Blanks
61 - 63	Guarantee Agency	600-899
64 - 65	G/A State	Standard FIPS Code
66	G/A Prefix	Zero
67 - 75	G/A EIN	000999600-000999907
76 - 77	G/A Suffix	Blanks
78 - 124	Filler	Blanks
125 - 128	Schedule Number	One unique number per transmission.
129	Type of Payment	Regular = 0 Manual = 1 Blank = 0
130 - 155	Filler	Blanks

Each line item within the batch will create a 155 character record as follows:

1 - 2	Transaction Code	"03"
3 - 12	Claim Number	From Batch Control
13 - 16	Page Number	Cannot be zeros, R/J
17 - 25	SSN	Default to zeros
26 - 45	Last Name	Default to blanks

EXHIBIT 2-6
DATA ENTRY KEYING EDITS (Continued)

46 - 60	First Name, MI	First Name, space, MI, space, suffix
61 - 63	Guarantee Agency	From Batch Control
64 - 65	G/A State	From Batch Control
66	G/A Prefix	From Batch Control
67 - 75	G/A EIN	From Batch Control
76 - 77	G/A Suffix	From Batch Control
78	Original Lender Prefix	Zero
79 - 87	Original Lender EIN	Default to zeros
88 - 89	Original Lender Suffix	Blanks
90	Default Code	Default to zeros
91 - 96	Default Date	Default to zeros
97 - 102	Disbursement Date	Default to zeros
103 - 108	Disbursement Amount	Dollars and cents. Default to zeros
109 - 112	Interest Rate	7% = 0700 9% = 0900
113 - 118	Total Claim Paid	Dollars and cents. Default to zeros
119 - 124	Principal Amount	Dollars and cents. Default to zeros
125 - 128	Schedule Number	From Batch Control
129	Type of Payment	From Batch Control
130	Manual Error	No error = 0 Manual error = 1
131 - 150	Filler	Blanks
151 - 155	Record Number	Used for error tapes only; otherwise zero fill.

only applies to agencies in the reinsurance program more than five years. It is designed to provide incentives for states to efficiently oversee lenders.

Valid claims are added to the State Collections (STACOL) file with each run. Once data have been added, there is no means of updating or deleting them; therefore, it is not possible to indicate adjustments to these claims.

The automated data processing system generates three reports. These are the Accepted Claims Report (ARP), Rejected Transactions Report (ERP), and the Check Control Report (CRP). All reports are sent to the Claims Unit and SLPC. The latter forwards copies of the ARP and ERP to guarantee agencies. File descriptions, error messages, and report samples from the automated data processing system are shown in Exhibits 2-7, 2-8, and 2-9, respectively.

2.5 MANUAL PROCESSING CONTINUED (See Appendix A.4)

The Claims Unit in DPO attempts to resolve special problems on an ad hoc basis. Typical problems include rebalancing 1189 forms, since the claims total reported by the guarantee agency on the 1189 form does not reflect rejected transactions, resolving adjustments to claims balances, and answering questions posed by guarantee agencies.

The Claims Unit also uses the CRP to prepare a payment voucher (1166 form) for each schedule number. (An example of a completed 1166 form is shown in Exhibit 2-10.) The vouchers are then forwarded to OFMS.

2.6 1189-2 AUTOMATED PROCESSING (See Appendix A.5)

In the collections system, 1189-2 forms are key entered at SLPC after receipt from the Collections Unit in DPO. SLPC retains and stores the forms. A transactions file, on tape, is then generated (see Exhibit 2-11 for the transaction file layout). The file does not indicate repurchased loans. At present, an automated state collections system to process collections documents is proposed but is not operational.

EXHIBIT 2-7
FILE LAYOUTS

GUARANTEE AGENCY TABLE #15

<u>FIELD</u>	<u>LENGTH</u>	<u>CHAR TYPE</u>	<u>ACCEPTABLE VALUES</u>
AGENCY CODE	03	N	600-899
AGREEMENT SWITCH	01	N	1 = SIGNED 0 = NOT SIGNED
AGENCY TOTAL LOAN REPAY	11	N	0.00-999999999.99
AGENCY 5% MAX	11	N	0.00-999999999.99
AGENCY 9% MAX	11	N	0.00-999999999.99
AGENCY YTD TOT CLAIMS	11	N	0.00-999999999.99
REIMBURSEMENT %	03	N	0.80-1.00
LAST CLAIM ID	05	N	00000
ALID	06	A/N	
DATE ORIGINAL			
AGREEMENT SIGNED	06	N	MMDDYY
DATE SUPPLEMENTAL			
AGREEMENT SIGNED	06	N	MMDDYY
DATE SUPPLEMENTAL			
AGREEMENT EXPIRES	06	N	MMDDYY
NEW AGENCY INDICATOR	01	N	
DATE REINSURANCE SIGNED	06	N	MMDDYY
INPUT TRANSACTION COUNT	04	N	FOR FUTURE USE
REJECTED TRANSACTIONS			
THIS RUN	04	N	FOR FUTURE USE
ACCEPTED TRANSACTIONS			
THIS RUN	04	N	FOR FUTURE USE
YTD. TRANSACTION COUNT - (ACCEPTED ONLY)	05	N	FOR FUTURE USE

EXHIBIT 2-7
FILE LAYOUTS (Continued)

USL DATABASE VERSION 6003

1330: STACLB

INDEX RECORD TYPE: STACLB

IS IN AREA: STACOLS
STORED VIA: CALC

DATABASE ACCESS:

1) . VIA CALC

KEY: STACLB-INDEX

ASC: LOPS NOT ALLOWED

2) . VIA AREA SWEEP OR ED-KEY

SUBORDINATE RECORDS:

STACOL

VIA STACLB-STACOL

NO PRIOR POINTED

DATA ELEMENTS:

01 STACLB.

05 STACLB-INDEX.

09 AGENCY-LID

PIC 59(6)

USAGE COMP.

09 GA-CLAIM-NUMBER

PIC 9(10)

USAGE COMP-3.

05 FILLER

PIC 11.

05 FILLER

PIC 1(4).

EXHIBIT 2-7 FILE LAYOUTS (Continued)

SQL DATABASE VERSION 8003

1340: STACOL

URNS RECORD TYPE: STACOL

IS IN AREA: STACOLS
STORED VIA: CALC

DATABASE ACCESS:

- 1) . VIA CALC KEY: SOC-SLC-NO ASC: DUPLICATED LAST
- 2) . VIA STACOL-STACOL UNSORTED SLT: MEMBERS ARE STORED "LAST".
NO PRIOR/OWNER POINTERS. OWNER: STACOL
AUTOMATIC --- CONNECTED AS A 1-PRODUCT OF THE STORE FUNCTION.
OPTIONAL --- MAY BE DISCONNECTED IF REQUIRED.
- 3) . VIA DAILY-STACOL-PAY UNSORTED SLT: MEMBERS ARE STORED "LAST".
NO PRIOR/OWNER POINTERS. OWNER: DAILY-STACOL-PAY
AUTOMATIC --- CONNECTION IS DONE AFTER THE STORE, IF EVER.
OPTIONAL --- MAY BE DISCONNECTED IF REQUIRED.
- 4) . VIA AREA SWEEP ON DE-KEY

SUBORDINATE RECORDS:

STAPAY VIA STACOL-STAPAY NO PRIOR POINTER

DATA ELEMENTS:

01	STACOL.		
05	SOC-SLC-NO	PIC 59(9)	USAGE COMP.
05	STUD-LAST-NAME	PIC 1(20)	
05	STUD-FIRST-NAME	PIC 1(15)	
05	STUD-PRV-NAME	PIC 1(20)	
05	GUARANTEE-AGENCY	PIC 5999	USAGE COMP.
05	CLAIMING-LENDING	PIC 59(6)	USAGE COMP.
05	GA-CLAIM-NUMBER	PIC 9(10)	USAGE COMP-3.
05	COLLECTION-RATE	PIC 599999	USAGE COMP.
05	REIMBURSE-PCT	PIC 59999	USAGE COMP.
05	OE-PAY-AMOUNT	PIC 59(5) 999	USAGE COMP.
05	DISBURSE-AMOUNT	PIC 59(5) 999	USAGE COMP.
05	DISBURSE-DATE	PIC 59(6)	USAGE COMP.
05	APPROVAL-DATE	PIC 59(6)	USAGE COMP.
05	DEFAULT-DATE	PIC 59(6)	USAGE COMP.
05	DEFAULT-TYPE	PIC 1.	
05	CLAIM-LISP	PIC 11.	
05	CLAIM-DISP-DATE	PIC 59(6)	USAGE COMP.
05	SCHEDULE-NO	PIC 59999	USAGE COMP.
05	ACCURED-COL-INT	PIC 59(5) 999	USAGE COMP.
05	INTEREST-BALANCE	PIC 59(5) 999	USAGE COMP.
05	PRINCIPAL-BALANCE	PIC 59(5) 999	USAGE COMP.
05	LATE-LAST-DATE-GA	PIC 59(6)	USAGE COMP.
05	INT-INT-DATE	PIC 59(5) 999	USAGE COMP.
05	ACCURED-INT-DATE	PIC 59(6)	USAGE COMP.
05	AGENCY-LIB	PIC 59(6)	USAGE COMP.
05	AGENCY-STATE	PIC 11.	

CONTINUED . . .

EXHIBIT 2-7
FILE LAYOUTS (Continued)

GSL DATABASE VERSION 8003 PAGE 1

13-0: STACOL

05	CAIS-CA-10TRD	PLC 89(5) V99	USAGZ COMP.
05	ORIG-CA-PRINC	PLC 89(5) V99	USAGZ COMP.
05	FILLER	PLC 89	

EXHIBIT 2-8
ERROR MESSAGES

BCS

<u>CODE</u>	<u>STATEMENT</u>
06	Warning - payment to O.E. too large
07	Lender not on lender file
08	Duplicate claim
09	Invalid claim type - reported
10	Invalid disbursement date for this claim type
11	Principal amt paid greater than total claim paid
12	Claim types are inconsistent among disbursements
13	Claim for collection not found
14	Last name does not match claim record
15	Duplicate payment
16	Warning - payment to O.E. too small
17	Invalid change code
18	Disbursement date prior to agency agreement date
19	Agency code not equal 1st 3 digits of claim ID
20	Default date prior to disbursement date
21	Schedule # not in range 3501 -.3599
22	Principal amount equals zero
23	Warning - cannot reimburse SSN; no total claim amt entered
24	Total claim paid equals zero
25	Batch rejected - agency code does not match agency state
26	Batch rejected - agency code does not match agency lid
27	Claim rejected - error in a related disbursement
28	Default date prior to agency agreement date
30	Manual error-see buck slip
31	Invalid SSN
32	Invalid last name
33	Warning - invalid first name
34	Invalid original lender
35	Invalid claim type - reported
36	Invalid default date
37	Default prior to disbursement
38	Invalid disbursement date
39	Disbursement prior to 11/7/65
40	Disbursement amount is zero
41	Disbursement > \$5000
42	Invalid interest rate
43	Total claim paid is zero
44	Claim paid < principal amount
45	Principal amount claim is zero
46	Principal amount claim > disbursement amount
47	Total claim amount not pro-rated

EXHIBIT 2-8
ERROR MESSAGES (Continued)

SLPC

<u>CODE</u>	<u>STATEMENT</u>
131	Pre-edit Error Principal Amount Claim Disbursement
134	Pre-edit Error Invalid Original Lender
135	Pre-edit Error Invalid Claim Type - Reported
136	Pre-edit Error Invalid Default Date
137	Pre-edit Error Default Prior to Disbursement
138	Pre-edit Error Invalid Disbursement Date
139	Pre-edit Error Disbursement Prior to 11-07-65
145	Pre-edit Error Principal Amount Claim is Zero
146	Pre-edit Error Principal Amount Claim Disbursement

EXHIBIT 2-9
REPORT SAMPLES

ACCEPTED CLAIMS REPORT

GUARANTEE AGENCY CLAIMS PROCESSING
GUARANTEE AGENCY ACCEPTED CLAIMS REPORT
PARTICIPATING AGENCY 709
AGENCY LENDER ID 999706

PAGE 11

FEB-15-83

CLAIM PAGE	CLAIM#	SSN	LAST NAME	AGCY CODE	ORIG LID	CLAIM TYPE	DATE OF DEFAULT	DISB DATE	DISB AMOUNT	RATE	CLAIM PAID	PRINC BAL	SCHED	REIMB PCT	O.E. PAID
0001	7098300014	047382284	CARTER	709	826489	5	070482	040979	625.00	.0700	1.00	.00	0114	1.00	1.00
0001	7098300014	047382284	CARTER	709	826489	5	070482	062579	1250.00	.0700	1.00	.00	0114	1.00	1.00
0001	7098300014	047382284	CARTER	709	826489	5	070482	021480	625.00	.0700	2147.12	.00	0114	1.00	2147.12
0001	7098300014	040521740	EMERSON	709	815886	5	061881	061972	1500.00	.0700	1200.00	.00	0114	1.00	1200.00
0001	7098300014	040521740	EMERSON	709	815886	5	061881	071873	1500.00	.0700	1500.00	.00	0114	1.00	1500.00
0001	7098300014	040521740	EMERSON	709	815886	5	061881	080774	1500.00	.0700	1500.00	.00	0114	1.00	1500.00
0001	7098300014	040521740	EMERSON	709	815886	5	061881	073175	1500.00	.0700	1500.00	.00	0114	1.00	1500.00
0001	7098300014	040521740	EMERSON	709	815886	5	061881	080878	5000.00	.0700	5000.00	.00	0114	1.00	5000.00
0001	7098300014	040521740	EMERSON	709	815886	5	061881	051281	5000.00	.0700	5000.00	.00	0114	1.00	5000.00
0001	7098300014	048507367	FELLOWS	709	802033	5	072082	122171	750.00	.0700	1.00	.00	0114	1.00	1.00
0001	7098300014	048507367	FELLOWS	709	802033	5	072082	060672	1500.00	.0700	1.00	.00	0114	1.00	1.00
0001	7098300014	048507367	FELLOWS	709	802033	5	072082	060573	1500.00	.0700	1578.00	.00	0114	1.00	1578.00
0002	7098300014	040646319	KOCHERSPER	709	824608	5	012982	082177	2500.00	.0700	1.00	.00	0114	1.00	1.00
0002	7098300014	040646319	KOCHERSPER	709	824608	5	012982	102779	2500.00	.0700	4999.00	.00	0114	1.00	4999.00
0002	7098300014	048524923	PERRUCCIO	709	816273	5	041462	051581	2500.00	.0700	2537.53	.00	0114	1.00	2537.53
0002	7098300014	045467697	SPENCER	709	815818	5	062182	110580	2500.00	.0700	2500.00	.00	0114	1.00	2500.00
0002	7098300014	048526906	TARDIFF	709	815875	5	080182	091781	2500.00	.0700	1720.86	.00	0114	1.00	1720.86
CLAIM: 7098300014		AGENCY: 709		TOTAL O.E. PAID:		31207.51		TRANSACTIONS: 00017							

2-24

EXHIBIT 2-9
REPORT SAMPLES (Continued)

CHECK CONTROL REPORT

19-FEB-83

CHECK CONTROL TOTALS

PAGE 4

**** SCHEDULE NUMBER 0114 ****

709 CONNECTICUT STUDENT LOAN FOUNDATION (CT)

NUMBER OF DISBURSEMENTS
NUMBER OF BORROWERS

RECORDS
198
105

AMOUNT
\$313,015.71
\$313,015.71

DEF TYPES	OBJECT CLASS	APPROPRIATION	ACCOUNT	FY	DISBURSEMENTS	BORROWERS	AMOUNT
1,7	4212	91X0230	E005106	83	175	95	\$269,158.97
1,7	331W	91X0230	E005131	83	173	94	\$8,936.24
3,4	4211	91X0230	E005104	83	0	0	0.00
5,6	4211	91X0230	E005143	83	17	7	\$31,207.51
2	4211	91X0230	E005145	83	6	3	\$3,712.99

2-25

EXHIBIT 2-9
REPORT SAMPLES (Continued)

CHECK CONTROL REPORT

NO	LENDER NO	LENDER NAME	CLAIM NO	DEF TYPE	AMOUNT OF CHECK	LOANS	STATE
	789	CONNECTICUT STUDENT LOAN FOUNDATION	7098300014	1 7 5 2	313,015.71	198	CT
					TOTAL:	313,015.71	

2-26

EXHIBIT 2-9
REPORT SAMPLES (Continued)

REJECTED TRANSACTIONS REPORT

GUARANTEE AGENCY CLAIMS PROCESSING
WEEKLY REJECTED TRANSACTIONS REPORT

PAGE 1

FEB-15-83

AGENCY CODE 709 AGENCY LENDER ID 999706

CLAIM PAGE	CLAIM#	SSH	LAST NAME	AGCY CODE	ORIG LID	CLAIM TYPE	DATE OF DEFAULT	DISB DATE	DISB AMOUNT	RATE	CLAIM PAID	PRINC PAID	SCHED
0011	7098300014	042425422	MASTROPIET	709	802031	1	112082	100967	400.00	.0600	37.19	36.85	0114
	(18)DISBURSEMENT DATE PRIOR TO AGENCY AGREEMENT DATE												
0018	7098300014	044625693	VERNON	709	802031	1	092082	052776	1500.00	.0700	.00	1362.26	0114
	(11)PRINCIPAL AMT PAID GREATER THAN TOTAL CLAIM PAID												
0018	7098300014	044625693	VERNON	709	802031	1	092082	072177	1500.00	.0700	2924.84	1500.00	0114
	(08)DUPLICATE CLAIM												
D/B	7098100047	044625693	VERNON	709	802031	1	052081	072177	1500.00	.0700	.00	.00	0126
D/B	7098100047	044625693	VERNON	709	802031	1	052081	072177	1500.00	.0700	2944.60	2944.60	0126

AGENCY: 709 CONTROL: 2962.03 TRANSACTIONS: 00003

2-27

EXHIBIT 2-10
SAMPLE OF COMPLETED 1166 FORM

OF 1166-202 4-17-63 1166-202		VOUCHER AND SCHEDULE OF PAYMENTS	
DEPARTMENT OR ESTABLISHMENT		EDUCATION DEPARTMENT	
BUREAU OR OFFICE		OFFICE OF STUDENT FINANCIAL ASSISTANCE	
LOCATION OF TRANSMITTING OFFICE		WASHINGTON, D.C. 20202	
PURSUANT TO AUTHORITY VESTED IN ME, I CERTIFY THAT THE ITEMS LISTED HEREIN ARE CORRECT AND PROPER FOR PAYMENT FROM THE APPROPRIATIONS. (SEE INSTRUCTIONS REPORTING VOUCHERS)		PAID BY	
SERENA C. SMITH AUTHORIZED CERTIFYING OFFICER <i>2/16-53</i> <i>2458206</i> DATE		TREASURY DEPARTMENT DIVISION OF DISBURSEMENT WASHINGTON, D.C. SYMBOL 3005 FEB 17, 1968 91-02-0001 CP5051A REG CK NO. ENG CK AC. 00,447,693 00,447,703	
APPROPRIATION SUMMARY: PL: 89-329, SEC. 430 & 428 90-460, SEC. 437 & 428(C) 91X0230 00-4212 3E005106 84,761,198.30 91X0230 00-4211 3E005145 8 132,547.54 91X0230 00-331W 3E005131 8 195,738.62 TOTAL 85,089,484.46			
ALIGN AREA: XX		XX - ALIGN AREA	

FORM SHEET	OF	AGENCY STATION NO	SCHEDULE NUMBER	FOR D.O. USE ONLY
11	1	91-02-0001	CP5051A	

GRAND TOTAL	NO-CHECK TOTAL
508948446	

MEMORANDUM

NAME AND IF NECESSARY ADDRESS (INVOICE NUMBER OTHER IDENTIFICATION LINE 1, 2 & 3 AND 4)	AMOUNT	NO. CHECK	VOUCHER NO
ILLINOIS GUAR LOAN PROG DEERFIELD, IL 60015	102 WILNOT ROAD *REINS CL NO 7178300006	9237710	1376002057C4 999712
ILLINOIS GUAR LOAN PROG DEERFIELD, IL 60015	102 WILNOT ROAD *REINS CL NO 7178300007	10526463	1376002057C4 999712
ILLINOIS GUAR LOAN PROG DEERFIELD, IL 60015	102 WILNOT ROAD *REINS CL NO 7178300009	7898928	1376002057C4 999712
ILLINOIS GUAR LOAN PROG DEERFIELD, IL 60015	102 WILNOT ROAD *REINS CL NO 7178300010	6416278	1376002057C4 999712
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300001	19455465	1146013200M1 999731
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300002	82191206	1146013200M1 999731
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300003	95440938	1146013200M1 999731
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300005	75276906	1146013200M1 999731
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300005	75276907	1146013200M1 999731
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300007	63613822	1146013200M1 999731
NEW YORK HI ED SER CORP ALBANY, NY 12255	99 WASH AVE., TWIN TOWERS 15 FL *REINS CL NO 7368300007	63613823	1146013200M1 999731

D O CHECK NUMBERS	BEGINNING	ENDING	BEGINNING	ENDING

USE FOR FIRST CHECK SERIAL NUMBER RANGE USE FOR SECOND CHECK SERIAL NUMBER RANGE IF APPLICABLE

EXHIBIT 2-11
OUTPUT OF O.E. FORM 1189-2 (COLLECTIONS)

There will be one header record per batch control. This is an 85 character record created from the batch control ticket. All fields must be present and valid or the entire batch will be rejected to clerical. The only exception is the collection fees which can be zeros. The header will read as follows:

Column	Item	Description
1 - 2	Transaction Code	'02'
3 - 4	Batch Code	Must be alpha
5 - 13	Collection Fees	R/J, zero fill
14 - 16	Guarantee Agency	600 - 899
17 - 26	Filler	Zeros
27 - 30	Schedule Number	One unique schedule per series
31 - 32	Fiscal Year	75 - 80
33 - 37	Filler	Zeros
38 - 48	Batch check amount	Cannot be zeros
49 - 50	Date of Receipt	MM 1 - 12
51 - 52	Date of Receipt	DD 1 - 31
53 - 54	Date of Receipt	YY current year or current year minus one
55 - 60	Filler	Zeros
61 - 62	G/A State	Standard FIPS code
63	G/A Prefix	Zero
64 - 72	G/A EIN	000999600 - 000999907
73 - 74	G/A Suffix	Blanks
75 - 85	Filler	Blanks

EXHIBIT 2-11
OUTPUT OF O.E. FORM 1189-2 (COLLECTIONS)
(Continued)

Each line item within the batch will create an 85 character data record as follows:

Column	Item	Description
1 - 2	Transaction Code	'07'
3 - 4	Batch Number	From Batch Control
5 - 13	SSN	Default to zeros
14 - 16	Guarantee Agency	From Batch Control
17 - 20	Page Number	Cannot be zeros, R/J
21 - 25	Last Name	Default to blanks
26	Source Code	Regular = blanks Repurchase = R
27 - 30	Schedule Number	From Batch Control
31 - 36	Date Received	Default to zeros
37 - 42	Amount Received	Dollars and cents
43 - 48	Amount Reimbursed	Dollars and cents
49 - 54	Date of Receipt	From Batch Control
55 - 60	Date of Disbursement	Used for Repurchases only; otherwise zero fill.
61 - 62	G/A State	From Batch Control
63	G/A Lender Prefix	From Batch Control
64 - 72	G/A Lender EIN	From Batch Control
73 - 74	G/A Lender Suffix	From Batch Control
75 - 80	Filler	Blanks
81 - 85	Record Number	Used for error tapes only; other- wise zero fill

2.7 OFMS OVERVIEW (See Appendix A.6)

All receivables, claims payments, and collections data are forwarded to OFMS by the Claims and Collections Units. Obligation fund information is also received by OFMS from DPPD. The OFMS accounts system then reconciles collections, payment, and funding data and generates various accounting reports. One such report, Schedule 9 (see Exhibit 2-12), includes aging data on delinquent receivables. Delinquent loans are aged from date of claim since OFMS does not have information on default date. OFMS also interacts with the Treasury Department concerning the generation of claims payment checks. This interaction is further described in the following subsection on the Disbursement Process.

2.8 DISBURSEMENT PROCESS (See Appendix A.7)

OFMS sends the 1166 vouchers to the Treasury Department. Treasury, in turn, prepares the claims checks, sends them to the guarantee agency, returns the vouchers to OFMS, and forwards copies of the vouchers and Treasury check numbers to the Claims Unit in DPO. OFMS prepares a disbursement register (see Exhibit 2-13), although the data in it are often inaccurate according to OFMS staff.

2.9 COLLECTIONS PROCESS (See Appendix A.8)

In the area of collections, deposit tickets are prepared for all collections checks received. The checks are then deposited in the ED collections account in a commercial bank. A copy of each deposit ticket is sent to the Treasury Department which, in turn, forwards a monthly deposit report to OFMS. OFMS then reconciles appropriation numbers by Common Account Number (CAN) and DPO reconciles collections by Social Security number and state. Collections are reported on the disbursement register as negative disbursements.

2.10 RETURNED AND CANCELLED CHECKS (See Appendix A.9)

Cancelled and returned uncashed claims checks are sent back to the Treasury Department. Cancelled checks are put in a suspense account until OFMS can reconcile them with appropriation numbers using data from the Claims Unit in DPO.

EXHIBIT 2-12
SAMPLE OFMS ACCOUNTING REPORT

OMB Use Only

SCHEDULE 9. REPORT ON STATUS OF ACCOUNTS AND LOANS RECEIVABLE DUE FROM THE PUBLIC		AS OF
BUREAU OF PUBLIC ROAD REINSURANCE Student Loan Program (GSL)		Dec 31, 1962
BUREAU IDENTIFICATION NO. 91-02-0001		FUND ACCT. SYMBOL 91XD230
Section I: RECONCILIATION	ACCOUNTS RECEIVABLE	LOANS RECEIVABLE
1. Beginning Receivables	195,264,818 e.	828,998,034
2. Activity	708,810 e	40,503,426
a. New receivables during the fiscal year	-0-	-9,095,775 e
b. Repayments of receivables	-0-	-0-
c. Reclassified amounts	-0-	-0-
d. Amounts written off	-0-	-1,696,120
3. Ending receivables	195,973,628 e	858,709,585
Section II: OUTSTANDING RECEIVABLES		
1. Current receivables	735,000 e	42,000,000 e
a. Not Delinquent		XXXXXXXXXX
b. Delinquent		
1. 1-30 days	58,634 e	10,051,489 e
2. 31-90 days	355,612 e	30,481,012 e
3. 91-180 days	776,583 e	44,261,857 e
4. 181-360 days	4,353,058 e	124,573,079 e
5. Over 360 days	189,696,741 e	807,542,148 e
Total Delinquent Receivables	195,238,628 e	816,709,585 e
2. Non-current receivables	XXXXXXXXXXXX	-0-
3. Total Receivables	195,973,628 e	858,709,585 e
Section III: ALLOWANCES AND WRITE-OFFS		
1. Total allowances for uncollectible accounts, beginning of period	120,139,273	704,981,451
2. Total actual write-offs during the fiscal year	-0-	-1,696,120
3. Adjustment to allowance account for the period (provision for loss expense)	-0-	-0-
4. Total allowances, end of period	120,139,273	703,285,331
Section IV: ADMINISTRATIVE ACTIONS		
1. Delinquent accounts referred to GAO	-0-	-0-
a. Number	-0-	-0-
b. Amount	-0-	-0-
2. Delinquent accounts referred to Justice	-0-	-0-
a. Number	-0-	-0-
b. Amount	-0-	-0-

EXHIBIT 2-12
SAMPLE OFMS ACCOUNTING REPORT (Continued)

SCHEDULE 9. REPORT ON STATUS OF ACCOUNTS AND LOANS RECEIVABLE DUE FROM THE PUBLIC		AS OF Dec 31, 1982	
BUREAU OR FIELD NAME Student Loan Program		FUND IDENTIFICATION NO. 91-02-0001	
Section V: RESCHEDULED RECEIVABLES		FUND ACCT. TYPE 91X0230	
	ACCOUNTS RECEIVABLE	LOANS RECEIVABLE	OTHER DEBIT
1. Current Rescheduled Receivables			
a. Not Delinquent	-0-	-0-	XXXXXXXXXX
b. Delinquent			
1. 1-30 days			XXXXXXXXXX
2. 31-60 days			XXXXXXXXXX
3. 61-180 days			XXXXXXXXXX
4. 181-360 days			XXXXXXXXXX
5. Over 360 days			XXXXXXXXXX
Total Delinquent Rescheduled	-0-	-0-	XXXXXXXXXX
2. Non-Current Rescheduled Receivables	XXXXXXXXXXXXXX	-0-	
3. Total Rescheduled Receivables	-0-	-0-	
Section VI: INTEREST AND PENALTIES ON DELINQUENCIES			
1. Beginning interest and penalties	-0-	-0-	
2. Activity			
a. New interest and penalties assessed during the fiscal year			
b. Interest and penalties collected during the fiscal year			
c. Interest and penalties written off during the fiscal year			
3. Ending interest and penalties	-0-	-0-	
SUPPLEMENTAL AGING SCHEDULE		(Applicable to agencies providing estimates in Section II)	

AGENCY CONTACT

Preparer's name: Jim Sturdivant

Telephone number: 202-472-6180

Address: Department of Education
400 Maryland Avenue.
SW, Washington, DC 20202

Supervisor's name: Guy Danley

Telephone number: 202-472-6180

BEST COPY AVAILABLE

EXHIBIT 2-13 OFMS DISBURSEMENT REGISTER

RRS CONTROL 0997

OFMS DISBURSEMENT REGISTER

PAGE 484

RUN DATE 01/10/83

SUMMARY REPORT BY ACCOUNTING POINT

MONTH OF DEC 1982

FFY: 1980 ACCOUNTING POINT: 00 TITLE: HEADQUARTERS - WASHINGTON DC

APPROPRIATION TITLE: STUDENT LOAN INSURANCE -POST SEC ED

SYMBOL: 91 X 0230

CODE: 049

SCHEDULE	BATCH DATE	BATCH NO	EXPENDITURE AMOUNT	ERROR-PEND AMOUNT	COMBINED AMOUNT
CP0001	07/01/80	063	.00	979.44	979.44
CP0002	07/01/80	065	.00	1,048.05	1,048.05
CP0004	12/05/79	072	.00	8,470.73	8,470.73
CP0006	07/01/80	006	.00	466.97	466.97
CP0008	07/01/80	063	.00	16,435.87	16,435.87
CP0007	07/01/80	007	.00	2,713.95	2,713.95
CP0011	07/01/80	004	.00	2,057.21	2,057.21
CP0012	07/01/80	066	.00	16.72	16.72
CP0013	07/01/80	065	.00	1,402.27	1,402.27
CP0014	07/01/80	007	.00	310.99	310.99
IP0003	09/26/80	001	.00	429.17	429.17
IP0006	09/30/80	001	.00	628.79	628.79
IP0019	10/21/80	013	.00	13.60	13.60
IP0022	05/30/80	003	.00	258.91	258.91
IP0029	06/21/80	002	.00	293.39	293.39
IP0032	06/27/80	003	.00	212.97	212.97
IP0082	02/17/80	005	.00	57.29	57.29
IP0100	03/14/80	002	.00	9.74	9.74
IP0106	04/02/80	001	.00	373.44	373.44
IP0123	04/25/80	026	.00	69.01	69.01
160029	11/05/82	N19	2,154.64-	.00	2,154.64-
181058	09/18/81	N73	6,437.49-	.00	6,437.49-
860233	05/14/82	84N	5,804.52-	.00	5,804.52-

EXHIBIT 2-13 OFMS DISBURSEMENT REGISTER (Continued)

RRS CONTROL 0997

DEFMIS DISBURSEMENT REGISTER

PAGE 465

RUN DATE 01/10/83

SUMMARY REPORT BY ACCOUNTING POINT

MONTH OF DEC 1982

FFY: 1980 ACCOUNTING POINT: 00 TITLE: HEADQUARTERS - WASHINGTON DC

APPROPRIATION TITLE: STUDENT LOAN INSURANCE -POST SEC ED

SYMBOL: 91 X 0230

CODE: 049

SCHEDULE	BATCH DATE	BATCH NO	EXPENDITURE AMOUNT	ERROR-PEND AMOUNT	COMBINED AMOUNT
880857	09/28/82	39P	2,132.43-	.00	2,132.43-
TOTAL FOR APPROPRIATION			18,529.08-	38,246.51	19,717.43

3.0 ANALYTIC FRAMEWORK

3.1 INTRODUCTION

It is important that an evaluation of the problems and potential corrective actions in the reinsurance process be well-grounded in the policy context within which the GSL system operates. An understanding of this policy context is important because:

- The legislative and programmatic history can be a resource in identifying problem areas and reasons for these problems.
- Corrective actions to overcome these problems must be consistent with the current policy climate.

Each of these issues is discussed in turn. Subsequently, a set of evaluation criteria consistent with the historical and current policy contexts is developed. These criteria will be used to analyze the merits of various corrective actions.

3.2 HISTORICAL POLICY CONTEXT

A variety of historical factors have helped shape the current GSL reinsurance process. Among the more important factors are:

- The large number of revisions and amendments to the original GSL legislation
- A commitment to initiating the program as soon as possible with only secondary regard to sound accounting and administrative practices
- The shift in emphasis from FISL to reinsured student loans.

Each of these factors has contributed to some of the problems inherent in the reinsurance process.

3.2.1 Legislative Revisions and Amendments

One major determinant of the current operational problems in reinsurance is GSL's legislative history. The GSL program has been shaped by a legislative process of revision and amendment. Among the conclusions of a 1977 study group on Title IV programs convened by the Secretary of Health, Education, and Welfare was that student aid legislation, including GSL, provided a patchwork of assistance to meet changing problems and concerns.¹ This legislative patchwork has resulted in several complex programmatic and systemic problems. A brief presentation on GSL's legislative history illustrates the impact of these frequent amendments and revisions.

The GSL program was created by the Higher Education Act of 1965. The legislation had three main purposes which hold constant today:

- To encourage states and nonprofit private institutions to establish adequate loan insurance programs for college students
- To provide a Federal program of loan insurance for students who do not have access to other programs
- To subsidize a portion of the interest on loans made by student borrowers.

To accomplish these purposes, the legislation contained three major provisions:

- Authorization of advances for reserve funds for state and private nonprofit loan insurance programs
- Establishment of a Federal loan insurance program
- Authorization of a program to pay interest subsidies on loans made by student borrowers.

¹The Student Financial Assistance Study Group, Report to the Secretary: Recommendations for Improved Management of Federal Student Aid Programs, U.S. Department of Health, Education and Welfare, June 1977.

Despite the continuity of general program goals, the specific mechanisms of GSL changed frequently. For example, the Higher Education Amendments of 1968 made revisions to the:

- Fund advance program
- Loan insurance provisions
- Reinsurance provisions.

In the area of reinsurance, changes included:

- Reducing the Federal liability for defaults from 100 percent to 80 percent while making the guarantee agency responsible for the balance (FISL loans continued to be insured at 100 percent)
- Expanding the amount of default for which the Federal government was liable in the case of death or disability to include the interest owed on the loan
- Authorizing deferment of repayment while the borrower was enrolled full time at a postsecondary institution, or for a maximum of three years while the borrower was serving in the military, Peace Corps, or VISTA
- Authorizing Federal payment of interest accrued during the deferment period.

In 1969, the Emergency Insured Student Loan Act was passed because of rising market interest rates and the ceiling on GSL interest rates. It provided a special allowance to be paid by the government to student loan lenders. The allowance was based on the total amount of unpaid student loans held by each lender. This amount, set each quarter, could not exceed 3 percent of the cumulative amount the lender had disbursed to date.

The Education Amendments of 1972 extended the GSL program through FY75 and introduced changes in the maximum annual individual loan ceiling and need requirements. However, perhaps the most significant provision of the 1972 Amendments was the creation of the Student Loan Marketing Association (SLMA), a government-sponsored private corporation, to serve as a secondary market and warehousing facility for insured student loans. The purpose of SLMA was to encourage lenders to participate in the insured student loan program. Sallie Mae, as the Association has come to be known, was authorized to make advances on the security, purchasing, servicing, and selling of insured student loans.

The Education Amendments of 1976 brought a great number of programmatic and technical changes to GSL. Among these changes:

- Revised terms were issued for Federal advances on reserve funds for guarantee agencies.
- Eligibility for the student loan subsidy program was broadened.
- Subsidy payments to private sector eligible lenders were restructured.
- Graduate and professional students were now allowed a \$5,000 annual loan; undergraduate students were still limited to a \$2,500 annual insured loan. The \$7,500 aggregate amount was maintained for undergraduate borrowers, but the \$10,000 aggregate for graduate/professional students was raised to \$15,000.
- Loans made by guarantee agencies or educational institutions to first-year students were limited to the lesser of \$2,500 or 50 percent of the cost of attendance. Also, loans of over \$1,500 to first-time students had to be made in 2 or more installments.
- Student borrowers were now required to notify promptly the lending agency of a change of address.
- Borrowers could make arrangements with the lending agency to begin repayment earlier than after the 9- to 12-month grace period and to complete loan repayment sooner than the 5 year minimum repayment period.
- The deferment conditions were expanded to include a one-year period if borrowers were unable to find full-time employment.
- Academic institutions were now required to be notified when a Federally insured loan was procured by attending students.
- Loan payments were required to be made by check with the borrower's endorsement.
- The \$360 minimum annual individual repayment was continued, with a new exemption for husbands and wives each having outstanding loans. In such cases, the minimum annual repayment was \$360 for the couple.
- An annual \$10 payment per guaranteed loan recipient was authorized to each institution, first for the purpose of disseminating information about student financial aid programs, cost of attendance, and academic programs to current and prospective students, and then for additional administrative costs.
- Federal payments to guarantee agencies were authorized to cover up to one-fourth of the administrative costs of securing private lender participation and one-half of the costs of loan collections and preclaims

assistance. The total amount of Federal payments for these purposes could not exceed .05 percent of the total amount of student loan principal insured by the agency, except for those participating in the supplemental agreement who were eligible for an additional .05 percent payment.

- The Commissioner of Education was authorized to enter into contracts with collection and state guarantee agencies to collect defaulted loans.
- Educational institutions were restricted from making loans to more than 50 percent of their students or from making loans to undergraduate students not previously receiving an institutional loan, unless the student provides documentation that he or she was denied a loan from an eligible lender.
- Educational institutions which use commercial salesmen to promote guaranteed loans were excluded from program eligibility.
- The definition of eligible institution was changed to include those which enroll students beyond the age of compulsory attendance who do not have a high school diploma or equivalent.
- The method of determining Federal special allowance payments to lenders was revised.
- A Committee on the Process of Determining the Student Loan Special Allowance was established to devise better methods for establishing the special allowance payment and more efficient methods for disbursement.
- New incentives were introduced for states to establish guarantee agencies and participate in the reinsurance program.

This latter change is particularly important. These incentives were created because default rates were lower on reinsured loans than direct federally insured loans. This implies that the guarantee agencies were doing a better job of managing the collections process. The specific changes in the reinsurance program included:

- Reinsurance coverage was increased to 100 percent of principal and interest lost to default in guarantee agencies with low default rates.
- The level of reinsurance paid by the Federal government was tied to the guarantee agency's default rate. If the default rate was less than 5 percent, the reimbursement rate was 100 percent. If the default rate was at least 5 and less than 9 percent, the reimbursement rate was 90 percent. If the default rate equaled or exceeded 9 percent, the reimbursement rate was set at 80 percent. This does not apply to new agencies in their first 5 years of operation which are automatically reimbursed at 100 percent.

- Cost allowances to guarantee agencies for collections were increased. The agency could retain up to 30 percent as administrative costs for collections.
- Federal repayment of loans discharged because of bankruptcy were authorized only if the discharge was granted five years or later after the repayment period began.
- The issuance of new certificates of insurance by the Federal government to lenders in a state where every eligible institution had reasonable access to state or private nonprofit loan insurance programs was prohibited.

The revisions to the reinsurance system and participation incentives had a dramatic impact on the GSL program. Prior to the 1976 Amendments, only approximately half the states had guarantee agency programs and about 49 percent of GSL loans were reinsured by the Federal government. Today, guarantee agencies exist in all states and the percentage of reinsured loans represents over 95 percent of program lending.²

Various other amendments and revisions had programmatic impacts including the Middle Income Student Assistance Act of 1978, which removed the income ceiling for eligibility in interest subsidies; the Education Amendments of 1980, which increased the role of guarantee agencies in the GSL program and created a loan program for parents; and the Education Amendments of 1981, which established a 5 percent loan origination fee, extended eligibility to include independent students, eliminated the special allowance to lenders on most nonsubsidized student loans, eliminated the 6 month grace period after deferment, and eliminated the \$10 per year administrative cost allowance. The expanded role for guarantee agencies cited in the 1980 Amendments included the authorization for these agencies to:

- Make loans directly to eligible student borrowers unable to secure loans from private commercial lenders
- Determine borrowers' enrollment status and audit loan notes
- Provide loan servicing to lenders.

²"Guaranteed Student Loan Briefing Paper," U.S. Department of Education, Office of Student Financial Assistance, Division of Policy and Program Development, 1982.

The new loan program for parents is called Parental Loans for Undergraduate Schools (PLUS). Under this program, parents of eligible dependent undergraduate students could secure a guaranteed loan up to \$3,000 annually (\$15,000 total) at the same 9 percent interest rate applicable to student loans. Revisions in 1981 increased the interest rate on PLUS loans to 14 percent, however. Repayment of the parental loans begins 60 days after the loan is made, with no interest subsidies or deferral options.

3.2.2 Inadequate Accounting and Administrative Practices

A second historical determinant of existing problems in GSL and other student assistance programs was a commitment to implement these programs as soon as possible. Although on its own merit efficient implementation is an admirable goal, it was fulfilled at the expense of good administrative practices and sound accounting principles. The 1977 study group report addressed this issue when it said that the major goal of student assistance programs has been to "get the money out" as soon as possible.³ The report adds that little thought was given to good organizational management or control.

This historical factor has had two major repercussions. First, it has left many programs open to mismanagement, abuse, and fraud. Second, current efforts to correct administrative and accounting deficiencies have introduced new procedures and regulations. Many actors in the financial assistance community have reacted negatively to this disruption of the status quo, citing overregulation and increased administrative burden.

3.2.3 Shift in Balance between FISL and Reinsurance

A third factor that contributes to current GSL operational problems is the shift in the balance between Federally insured loans and reinsured loans. Although encouraging states to establish adequate loan insurance programs was an original goal of GSL, after dominance in the program's very early years, reinsurance was a less than equal partner from 1972 to 1975. As Exhibit 3-1 shows, the percent share of the GSL program attributable to reinsurance during these years ranged from 44 percent in 1972 and 1973 to 49 percent in 1975. Although FISL was the principal

³The Student Financial Assistance Study Group, Report to the Secretary.

EXHIBIT 3-1

ANNUAL LOAN VOLUME AND PERCENT SHARE OF GSL PROGRAM
FOR FISL AND GUARANTEE AGENCY COMPONENTS

Year	Loan Volume (in millions of dollars)		Percent Share of GSL Program Loan Volume	
	FISL	Guarantee Agency	FISL	Guarantee Agency
1966-1969	\$ 284	\$ 1,135	20%	80%
1970	354	457	44	56
1971	484	531	48	52
1972	708	566	56	44
1973	655	516	56	44
1974	612	528	54	46
1975	661	637	51	49
1976	740	1,088	40	60
1977	500	1,037	33	67
1978	473	1,485	24	76
1979	541	2,443	18	82
1980	504	4,336	10	90
1981	427	7,367	5	95

Source: U.S. Department of Education, Office of Student Financial Assistance, Division of Policy and Program Development, 1982.

component during this period, there was a relative balance between the two programs. Therefore, the shift beginning in 1976 is not primarily important because reinsurance surpassed FISL; it is important because of the rapid growth of reinsurance and the subsequent dominance of the component. In 1976, the guarantee agency program share of GSL rose sharply to 60 percent. Today, it surpasses 95 percent. As discussed in the legislative history section, the shift in balance is at least partly attributable to program amendments including:

- Increasing reinsurance coverage to 100 percent of lost principal and interest in agencies with low default rates
- Increasing the guarantee agency cost allowance to cover collection efforts
- Freezing the list of eligible lenders for the FISL program in states with adequate guarantee agency programs.

In addition to the shift in balance, a contributing factor to current problems is that claims and collections in GSL only come into the accounting system when a student defaults on a loan. Therefore, when the reinsurance component was comparatively small, existing management procedures were adequate to handle the volume. Although default rates have remained relatively stable according to DPPD, the explosion in the reinsurance component has greatly increased the overall number of defaults.⁴ Changes in accounting and management methods have not kept pace with the growth in volume.

This rapid expansion has taxed the administrative capabilities of the reinsurance program resulting in errors such as duplicate payments, overpayments, and underpayments. Management and accounting problems have resulted also in some intentional fraud and abuse. These and related problems have been repeatedly identified in various reports, audits, and public hearings.

For example, GAO has issued about 20 reports since 1968 citing problems in several areas of the GSL program. The majority of these reports were the result of

⁴"Guaranteed Student Loan Program Default Data," U.S. Department of Education, Office of Student Financial Assistance, Division of Policy and Program Development, 1983.

a Congressional mandate to audit annually the financial statements of the Student Loan Insurance Fund. The audits continually found financial statements to be inaccurate or poorly documented. Three additional reports deal with collections on defaulted loans (two reports on FISL and one report on reinsurance), while others examine:

- GSL loan disbursement procedures (1970)
- Coordination of student aid programs (1972)
- Administration of student aid programs (1974)
- GSL student bankruptcies (1978)
- GSL information system (1981).

A summary of the results of the two most recent reports (the 1981 report on the GSL information system and the 1982 audit of financial statements) illustrate the type of problems continually identified by GAO. The report on the information system found that the system was not sufficient to provide data needed to monitor compliance with program rules and regulations or to adequately account for the expenditure of funds.⁵ Many deficiencies were cited. For example:

- OSFA automatically reinsures state loans without checking to see that they meet Federal regulations.
- Each state lacks access to a student's prior loan activity in other states or in the FISL program. This information might help states better identify unqualified loan applicants.
- OSFA's loan history file, intended as a complete history of Federal and state student loan activity, is incomplete.
- OSFA pays claims on defaulted reinsured loans without assuring that these claims are valid.
- OSFA cannot provide an up-to-date status of state collections on defaulted loans and related repayments due the government.

⁵U.S. General Accounting Office, The Guaranteed Student Loan Information System Needs a Thorough Redesign to Account for the Expenditure of Billions, 1981.

- OSFA's program review of states does not compensate for system deficiencies.
- Interest and special allowance payments to lenders are not validated.
- Lenders are not rebilled for insurance premiums past due.
- GSL financial transactions are not reported or reconciled to financial records.

The report on FY80 financial statements identifies the following problems:⁶

- Control account balances maintained by OFMS could not be reconciled with subsidiary records in OSFA because the two units used different identification numbers, information in control accounts was not obtained from subsidiary accounts, and essential accounting documents were not controlled.
- Internal control procedures do not exist for several accounts, resulting in financial misstatements.
- Cash transactions are not always recorded in the correct fiscal year.
- Cancelled checks totaling \$14 million were added to cash balances before determining whether they were recorded when initially issued.
- Supervisory reviews and other verification procedures were often ineffective.
- The uncollectable portion of insurance premiums receivable was not recorded.
- Procedural errors and miscalculations resulted from clerical attempts to compensate for the inability of the GSL computer system to provide certain information.

As already indicated, the Secretary of Health, Education, and Welfare created a study group in 1976 to examine all Title IV programs. Its 1977 report presented a number of general problems relevant to GSL.⁷ For example:

- The Federal government has no overall philosophy of financial assistance on which to build a comprehensive and logical program of support.

⁶U.S. General Accounting Office, Adverse Opinion on the Financial Statements of the Student Loan Insurance Fund for the Fiscal Year Ended September 30, 1980, 1982.

⁷The Student Financial Assistance Study Group, Report to the Secretary.

- Legislation has provided a patchwork of assistance to meet particular needs and problems.
- The organization for administering student aid programs has followed this patchwork pattern of legislation, thus adding to already existing problems.
- The tremendous growth in participants and dollars expended has far exceeded the resources available to administer them.
- The major Federal goal has been to "get the money out" as soon as possible, with little thought given to organizational management and control.

In 1980, the Office of the Assistant Secretary for Management released a report on GSL and Pell delivery system deficiencies.⁸ Its list of GSL problems included the following:

- The existing system cannot accommodate legislative change without major revision.
- State agencies have difficulty coping with the variety of regulations and procedures.
- There is no financial integrity, leaving the system open for fraud and abuse.
- There is limited on-line query capability.
- Erroneous letters and bills are often sent.
- The system cannot selectively retrieve interest payment transactions.
- There is limited oversight of contractor performance.
- Student status verification by lenders is ineffective.
- System response time is often inadequate.
- The Federal government can reinsure loans to borrowers who have defaulted on other loans.

⁸Caccia, R., Lester, H., and Corrallo, S., Improving the Systems that Manage and Administer the Delivery of Student Financial Aid: A Special Report for the Secretary of Education, U.S. Department of Education, 1980.

- File structures are incorrectly designed and processing time is excessive.
- There is no system or user documentation.

IG has also conducted a series of audits of the GSL program. Two of the most recent reports deal with guarantee agency reserves and the reinsurance process. The latter report (forthcoming) maintains that the following problems exist in the reinsurance system:⁹

- Manual payments were made on some claims. These claims do not appear in the automated system.
- Key punch errors have resulted in some overpayments.
- Mispayments cannot be corrected in the automated system.
- Repurchases, supplemental claims, and adjustments are not adequately recorded in the automated system.
- Duplicate payments are often made.

This series of reports and audits shows that several common problems have been identified which are attributable to the rapid growth of the GSL program, in general, and the reinsurance component, in particular. As Section 4.0 of this report will show, many of these problems still remain today. Several others, however, have been corrected or are subject to ongoing corrective actions. For example, based at least in part on the recommendations of the 1976 study group, a single Office of Student Financial Assistance was created. Other reforms or current corrective actions include:

- The design of detailed operating procedures and control logs for staff involved with claims and collections in DPO
- Initiation of the tape dump project to provide a data base on GSL loans
- Installation of a batch balancing system at SLPC which should prevent major key punch errors
- The use of edit procedures in the automated system to prevent duplicate payments

⁹Briefing held with staff from the Office of the Inspector General, U.S. Department of Education, 1983.

- Resequencing of report runs to be more responsive to user needs
- Funding of several projects (including this project) to recommend corrective actions in the GSL program.

3.3 CURRENT POLICY CONTEXT

The recurrence of common problem areas in the various reports, audits, and hearings assessing the performance of GSL has lead to increasing awareness of the need for major delivery system redesign. The 1980 report from the Office of the Assistant Secretary for Management, for example, stresses the need for a systems approach to program deficiencies rather than ad hoc solutions to individual problems.¹⁰ GAO has, at various times, stated that the only way to thoroughly remedy existing problems was to totally redesign the GSL information system and develop plans and timetables for implementing a total GSL delivery system redesign. The reasoning behind this sentiment towards redesign is simple:

- Implementation of marginal changes has not significantly reduced system problems.
- Existing problems are quite severe and are system wide, making piecemeal corrective actions an ineffective strategy.

This growing commitment to redesign is perhaps best represented by some of the work being conducted on a Department-wide basis by ED's Credit Management Task Force. In the area of student aid delivery system redesign, the Task Force has:

- Held formal hearings on redesign to solicit input from the financial aid community
- Brought in technical experts to evaluate the use of new technologies in student aid delivery
- Contracted for a study of the effects of proposed delivery system alternatives.

¹⁰Caccia, Lester, and Corrallo, A Special Report to the Secretary of Education.

It is important that any existing future evaluation of corrective actions be fully aware of current initiatives in the redesign area. Plans for program enhancements that do not evaluate their compatibility with, or impact on, delivery system redesign are inappropriate.

3.4 EVALUATION CRITERIA

One of the major goals of this project is to identify corrective actions to eliminate or reduce current problems in the reinsurance process. Each preferred corrective action should be consistent with the history of the GSL program and the current policy climate. To ensure this consistency, a set of evaluation criteria have been developed. The evaluation criteria are:

- Flexibility to adapt to policy changes
- Cost (implementation cost and processing cost)
- Cost-effectiveness relationship
- Technological sophistication
- Compatibility with delivery system redesign
- Processing efficiency (for use only in evaluating automated data processing options).

First, as the legislative overview has shown, any proposed corrective action must be responsive to changes in policy. If an enhancement's benefits are undermined by such changes, implementation is not worthwhile given the frequent history of program amendments and revisions. In particular, the corrective action must be compatible with the increasing volume of defaults being handled in the reinsurance system.

Second, corrective actions must not be cost prohibitive. Given existing budget cuts throughout ED, an enhancement is only a realistic alternative if the implementation and processing costs are reasonable. This is not to imply that the lowest cost alternative is always preferable. In many cases, spending a little more money will greatly increase system performance.

Therefore, a third evaluation criteria is cost-effectiveness which measures output per dollar expended. In estimating cost-effectiveness, planners should consider such factors as whether the enhancement must be applied retroactively to maximize benefits and what the cost implications are in terms of staffing.

Fourth, the technical sophistication of the corrective action should be weighed. Preferred enhancements should, to the extent possible, utilize state-of-the-art technology.

Fifth, any proposed corrective action must take into account the current system redesign initiative. Costly enhancements with a short life span may be inappropriate unless they produce significant immediate benefits or can be incorporated into a redesign effort.

Sixth, processing efficiency must be considered. This refers primarily to turnaround time and the number of people needed to do the automated data processing.

4.0 PROBLEM AREAS

4.1 INTRODUCTION

In order to recommend corrective actions that parallel the most serious deficiencies of the reinsurance process and which are responsive to the needs of actors in the system, Advanced Technology undertook an evaluation of the problems and an identification of actors' needs. This section describes the methodology and results of this process.

4.2 PROBLEM IDENTIFICATION AND NEEDS ASSESSMENT METHODOLOGY

The problem identification and needs assessment procedure entailed three major components. These components were:

- A critique of systems documentation
- A review of past reports dealing with problems in the GSL system, in general, and the reinsurance process, in particular
- Interviews with major actors in the reinsurance process.

First, the Advanced Technology project staff analyzed the system documentation, file structures, and edit procedures of the two major current contractors in the reinsurance area, SMA and BCS. Documentation from the prior automated information system operator, On-Line Systems, was also analyzed.

Second, project staff reviewed previous reports and audits evaluating error-prone points in the GSL system and reinsurance subsystem. The most informative documents included the GAO reports on the Student Loan Insurance Fund (1980) and the GSL information system (1981), the IG reports on GSL interest payments (1981) and the reinsurance process (1983), the Student Financial

Assistance Study Group Report (1977), the Office of the Assistant Secretary for Management report on the delivery of student financial aid (1980), and the Advanced Technology draft report for the Credit Management Task Force on delivery system alternatives (1983).¹¹

Third, in order to conduct an independent assessment of reinsurance problems and identify the needs of actors in the system, a series of interviews was conducted with key staff. Respondents were selected from the principal OSFA Divisions involved in the reinsurance process, as well as major actors outside of OSFA. Interviews were conducted with OSFA staff from:

- DPO (GSL Branch: Claims and Collections Units)
- DPPD (GSL Branch: Analysis Section, Policy Section)
- Division of Certification and Program Review (Program Review Branch)
- Division of System Design and Development (GSL Branch).

Interviews were also conducted with knowledgeable individuals outside of OSFA, including representatives from:

- OFMS
- IG
- SLPC.

Each interview covered four general areas:

- Respondent descriptions of his/her role in the reinsurance process and of specific system procedures used in the respondent's Division
- Respondent perceptions of the problems in the reinsurance process

¹¹With the exception of the Advanced Technology report, all the other reports and audits were cited earlier. The Advanced Technology report referred to is Advanced Technology, Inc., Assessment of Student Aid Delivery Systems: Framework for the Specification of Alternatives, Draft, 1983.

- Respondent-identified needs for additional information on claims and collections and changes to the reinsurance process
- Respondent reaction to proposals for corrective actions made by project staff.

Specific questions dealt with such issues as:

- Adequacy of current data collection and reporting
- Adequacy of automated system procedures and edits
- Adequacy of existing manual quality control procedures
- Potential for fraud and abuse
- Possible marginal improvements to the GSL manual process
- Possible structural improvements to the GSL reinsurance process and redesign options.

The interviews were semi-structured. Open-ended questions were prepared to guide the interviewers. To fulfill the goal of specifying exact system procedures, however, interviewers informally followed up on many responses with probes and additional extemporaneous questions. Further, since the interviews were being used to identify problem areas, follow-up questions varied based on the type and severity of the problem identified by the respondent. Also, the specificity of follow-up questions varied depending upon the title of the person being interviewed and his/her knowledge and willingness to cooperate.

In order to utilize successfully a semi-structured interview format, interviewers must be knowledgeable about the subject matter being examined and the project goals; therefore, only senior project staff were utilized as interviewers. The Task Manager and Senior Systems Specialist for the GSL reinsurance project were present at all interviews. Additional senior project staff attended certain key interviews. All interviewers thoroughly reviewed the available system documentation and reports on GSL program problems prior to the interviews.

Interviews lasted between 30 and 60 minutes. In order to maintain the quality of the interview, all sessions were terminated after one hour, and follow-up interviews were conducted, if necessary. Follow-up interviews were also scheduled,

on an as-needed basis, to clarify information from the initial interview. Several respondents were recontacted for a follow-up interview.

With one exception, all interviews were conducted in person. The ED on-site monitor at SLPC in Norfolk, Virginia, was interviewed by telephone.

Interview respondents were primarily identified by the OSFA Project Monitor. The Monitor also scheduled all interviews and distributed a summary of project objectives to each respondent prior to the interview sessions. The thoroughness of the OSFA Project Monitor in identifying respondents and scheduling sessions, as well as the fact that project staff followed proper protocol procedures, contributed to the reliability and validity of the information collected in the interviews. Also, perhaps because of the severity of the problems in the reinsurance process, interviewers noted a strong commitment from most respondents to provide accurate and useful data.

4.3 FINDINGS

The problems identified through the interviews, system documentation critique, and reports and audits review deal primarily with three components of the reinsurance system. These components are the:

- Claims and Collections Units of DPO
- Data processing system
- OFMS.

4.3.1 DPO

Deficiencies in the Claims and Collections Units of DPO generally fall into two areas:

- Procedures
- Staffing and resources.

In addition, since DPO is the major actor handling claims and collections, it is a victim of some of the generic operational deficiencies in the reinsurance process. These general problem areas are discussed in a separate subsection.

Perhaps the paramount source of error in DPO is the lack of rigorous operating procedures and accompanying quality control procedures in the Claims and Collections Units. In addition, no up-to-date procedures manual exists. Further, staff are not formally trained in how to effectively and accountably perform their duties. These are serious problems since the role of the Claims and Collections Units is to manage the day-to-day operations of the reinsurance system. The immediacy of the problem is that all claims and collections pass through these Units and in FY81 the value of claims paid to guarantee agencies was nearly \$195 million and collections obtained were over \$37 million.¹²

As a result of the general absence of operating and quality control procedures, the following specific problems have resulted:

- Poor record keeping, including a lack of supporting documentation for adjustments and inconsistent verification of collections check amounts against 1189-2 forms and claims amounts against 1189 forms
- Possibility of duplicate payments
- No rechecks of staff computations on a formal basis resulting in possible underpayments or overpayments
- Inefficient communication with OFMS.

The second general area of problems in the Claims and Collections Units of DPO is staffing and resources. Budget cuts and reorganization have reduced staff size, downgraded staff positions, and resulted in a loss in experience and expertise in the Units. Of particular importance has been the loss of senior-level management expertise, due primarily to staff turnover and downgrading of positions, and the lack of accounting training and expertise among current staff. These are serious deficiencies given the rapidly increasing volume of claims and collections in the reinsurance system.

¹²Division of Policy and Program Development, "Guaranteed Student Loan Briefing Paper."

Among the problems related to operating resources is a lack of filing space. This has resulted in some confusion in the filing system. Some auditors reported that, when requested, the Units were unable to produce certain documents and backup materials on a timely basis.

4.3.2 Automated Data Processing

The reinsurance subsystem of the GSL data processing system is extremely limited and considerably inferior to the current state-of-the-art in systems design. There are several likely reasons for this.

First, the most recent contract to run the automated system called for a conversion of the previously existing system, not a redesign. Therefore, although the current contractor has made some significant system improvements, it inherited several major design flaws and limitations. Second, the current contractor has been limited in the range of improvements that could be instituted since these changes need to be funded on a task order basis. Third, and related to the preceding point, OSFA has been reluctant to invest resources in marginal changes for a system that has been severely criticized. Although a total commitment to redesign has not yet been made, the presence of the redesign issue has resulted in a reluctance to make temporary system improvements.

In the past, OSFA was able to cope with system limitations since reinsurance was a relatively small subsystem in the GSL processing system. However, with the rapid dollar volume increase in the last six years, reinsurance has turned into a major problem area despite remaining significantly smaller than many other GSL subsystems. The various reinsurance processing problems include:

- Lack of a functioning state collections system
- Difficulty in reconciling collections from loan defaulters with claims at the Social Security number level
- Inability to distinguish between repurchases and collections in data gathering for the potential state collections system
- Inability to determine overpayments and underpayments from ED to guarantee agencies
- No on-line query capability

- Inability to correct a claim after entry
- Reports that do not meet user needs
- Inability to enter a claim for a second default after the initial defaulted loan was repurchased without artificially adjusting the data
- Lack of an automated interface among DPO, OFMS, and the Treasury Department.

First, there is currently no functioning automated collections system. Such a system has been proposed, however, and SLPC is currently building files of records on collections taken from the 1189-2 forms. The lack of an automated collections system has put great strains on DPO staff who must process the increasing volume of collections manually.

Second, because the proposed collections system is nonfunctioning, it is not possible to reconcile collections with claims. Based on available documentation, it appears that reconciliation would be possible but inefficient if the collections system was running since the claims and collections files are not integrated.

Third, the current effort to build files of collections for a proposed future automated system does not successfully distinguish between regular collections and repurchases. Current documentation from SLPC indicates that a provision for such a distinction exists. However, the use of the 1189-2 form for both collections and repurchases and the inability of guarantee agencies to consistently indicate when a line item is a repurchase has led to possibly inaccurate records. Further, SLPC is not maintaining any additional data on repurchases to allow their efficient tracking.

Fourth, the automated system is not designed to track any payments due ED from guarantee agencies other than collections on defaulted loans. Therefore, overpayments on claims already paid to agencies (as well as underpayments) are not picked up by the system.

Fifth, there is no on-line query capability in the existing system. Therefore, DPO, OFMS, and DPPD do not have immediate access to claims and collections files. Such access could be used to identify and resolve particular problems, assess how close an agency is to hitting the trigger figure, and generate reports.

Sixth, the current file structure does not allow corrections to a claim or collection after it has been loaded into the data base. As a result, an audit trail showing adjustments to a claim or collection does not exist. Further, the system will not even accept deletions of entries after loading. Therefore, once a claim or collection is loaded into the automated system, it becomes a permanent record.

Seventh, current reports from the GSL reinsurance subsystem do not meet all users' needs. Some users require additional information that is not carried in existing reports. A separate aspect is that the sequencing of current reports is confusing and not optimal. (The current processing contractor has recently implemented changes that may reduce this problem.)

Eighth, the automated system is unable to accept as valid a claim on a second default after a loan that earlier was defaulted on is repurchased. It is possible that a student who is in default may make new arrangements to repay the loan. After the loan is repurchased, the student may default a second time. The subsequent claim, although valid, would be rejected by the system since the edit procedures would flag a duplicate Social Security number and disbursement date. In order to overcome this, prior to entry the data on the claim must be artificially adjusted.

Ninth, there is currently no automated interface among DPO, OFMS, and the Treasury Department. Data exchanges between these entities are currently hand carried. This has resulted in much inefficiency and, at times, lost documents.

4.3.3 OFMS

OFMS is an integral actor in the reinsurance process. The problems affecting OFMS fall into four areas:

- Difficulty in accurately aging receivables
- Difficulty in calculating outstanding collections balances
- Inefficient communication with the Claims and Collections Units in DPO
- Inability to distinguish between principal and interest on collected funds.

In order to project future fund balances, OFMS attempts to categorically age receivables (e.g., 1 to 30 days delinquent, 31 to 90 days delinquent) to

anticipate the likelihood of recapture. In addition, it is required to report these figures to the Office of Management and Budget (OMB). However, since OFMS does not currently receive information on date of default, it can only estimate these figures. It currently begins the aging process for delinquent claims at the date a claim is paid. This date is, typically, several months after the loan has actually become delinquent.

A second problem is that OFMS cannot calculate outstanding balances intermittently during the fiscal year. Currently, it does not maintain sufficient data to accomplish this task. It is probable, however, that these data exist within other ED entities, including the Claims and Collections Units in DPO.

This suggests a third problem. Communications between OFMS and OSFA are inefficient. This is evidenced by such factors as OFMS not receiving all relevant data maintained by DPO and other OSFA Divisions, data that are received are not transmitted on machine-readable media but are hand carried, and supporting documentation does not automatically accompany the transmission of a voucher from DPO to OFMS. As a result of the latter factor, OFMS must merely assume that when a voucher is received it is a valid obligation. In general, the current working relationship between OFMS and DPO is an informal one. More formal and rigorous procedures are needed guiding the interactions between these units.

Finally, OFMS' accounting capabilities are compromised because it cannot distinguish between principal and interest on claims. This is because the 1189-1 form breaks claims down only into principal and total claim paid. It cannot be assumed that interest is equal to the difference between these two categories since total claim paid may include other amounts such as collections fees and litigation costs.

4.3.4 General Problems

Many general problem areas are endemic to the entire reinsurance process. These problems affect all actors in the system, although their burden is probably felt heaviest in the DPO Claims and Collections Units. Many of these problems cannot be corrected without total overhaul of the reinsurance process. Since this is beyond the scope of this project, these general problems are presented only in summary fashion:

- Actors in the system cannot always tell if the amount on a collection check is correct since 1189-2 forms are not always filled out properly and repurchases are not always indicated.
- There are inaccuracies on several reinsurance forms. For example, death and disability incorrectly appear as codes on the 1189-1 form, and the last column on the 1189-2 form asks guarantee agencies to calculate and report the figure representing 80 percent of collections although states have been able to keep up to 30 percent of collections as administrative costs since 1976. Therefore, the 1189-2 form should ask states to report the figure representing 70 percent of these collections.
- The regulation on time limitation from default date to filing a claim is not rigorously enforced.
- Since it is rare for an agency to hit its trigger figure, and reimbursement prior to hitting the trigger is 100 percent, there may be a lack of incentive for guarantee agencies to maximize the efficiency of their operations.
- Agencies self-report the level of claims and collections and OSFA must accept their figures due to a lack of validation data. ✓
- Agencies self-calculate their administrative costs for making collections and OSFA must accept these figures due to a lack of validation data. ✓
- Many checks are not automatically cut by the system but are issued manually. This is time consuming and potentially error prone.
- It is difficult to identify and collect overpayments from ED to guarantee agencies.
- Quarterly reports are not submitted to OSFA in a timely manner.
- Quarterly reports often contain incomplete information.

5.0 CORRECTIVE ACTIONS

5.1 INTRODUCTION

Having identified the major problem areas in the reinsurance system, it is now possible to recommend corrective actions. This section discusses corrective actions in four categories:

- General issues in designing corrective actions
- Corrective actions in DPO
- Corrective actions in the automated data processing system
- Corrective actions in OFMS.

Prior to these discussions, an overview of the evaluation methodology used to assess corrective actions is presented.

5.2 EVALUATION METHODOLOGY

As indicated in Section 3.4, a series of evaluation criteria was developed that are consistent with the historical and current reinsurance policy contexts. These evaluation criteria are:

- Flexibility to adapt to policy changes
- Cost
- Cost-effectiveness relationship
- Technological sophistication
- Compatibility with delivery system redesign
- Processing efficiency (for evaluating automated data processing options only).

The evaluation criteria are utilized in two ways. In cases where multiple corrective action options exist, each option is compared against the evaluation criteria and the highest ranking option is considered the preferred alternative. In instances where a set of compatible corrective actions exist, each individual option is assessed against the evaluation criteria to determine whether it is a viable option.

This evaluation methodology is a subjective and intuitive one. Determining the compatibility of corrective actions with each evaluation criterion will be based upon the project team's knowledge of the GSL system, the reinsurance subsystem, systems design, as well as experience using quality control and corrective action frameworks. It is possible that another evaluation team could reach somewhat different conclusions about the priority of various corrective action options or the viability of a particular corrective action. Since the recommendations presented are normative, the project team has taken care to identify and discuss as many major corrective actions as possible. Also, any a priori biases in the analysis are carefully stated as opinions. Therefore, the reader can perform his or her own intuitive analysis on the preferability and viability of corrective actions.

A major normative assumption made by the project team concerning the automated data processing system must be discussed at this point. The project team believes that to maximize system performance, a redesign is necessary. Given the extent of existing problems, marginal data processing changes represent only a short-term, stop-gap mechanism. This bias is clearly stated by including "compatibility with delivery system redesign" as one of the evaluation criteria.

A second assumption is that, despite the current redesign initiative, implementation of a delivery system redesign is at least several years away. This assessment is based upon the high cost of redesign and the current belt-tightening environment existing in ED and throughout the Reagan Administration.

This latter assumption has resulted in a third normative judgment. Given the severity of existing problems, several marginal data processing corrective actions may be worthwhile investments until system redesign can be initiated. Since these are seen only as interim changes, the evaluation criteria of cost and cost-effectiveness are particularly important in evaluating marginal corrective action to the data processing system.

In summary, in the area of data processing, the project team has compared the general options of structural redesign and marginal corrective actions and concluded a priori that a system redesign is a preferred, and necessary, alternative. However, given the current political and budgetary environment and the severity of current problems, certain marginal changes may prove efficient as an interim solution. Therefore, marginal and structural changes are not necessarily incompatible alternatives.

5.3 GENERAL ISSUES IN DESIGNING CORRECTIVE ACTIONS

The processing function in the delivery of student assistance is intended to produce a product. That is, a great deal of data are obtained, processed, transformed, and an output document is ultimately produced. For example, the primary processing task of the Pell Grant application processor is to produce a Student Aid Report (SAR). In the case of reinsurance claims, the ultimate product is a check that is mailed to guarantee agencies.

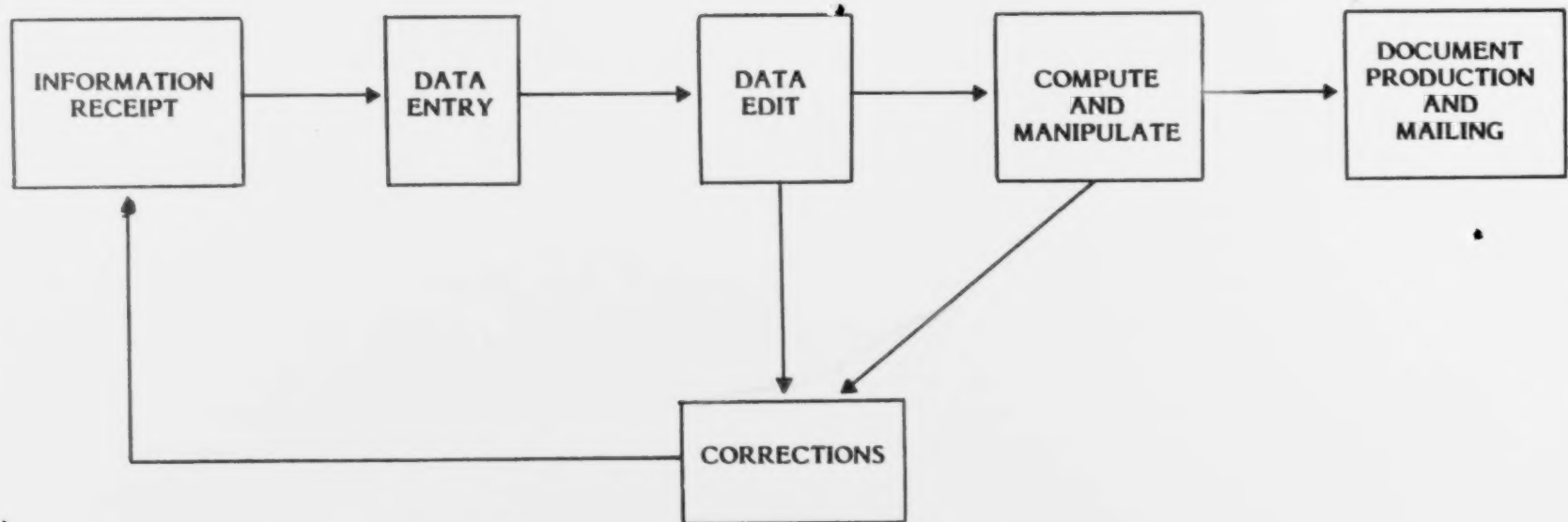
The specific interim processing steps in producing a product may vary among delivery systems depending upon what data are being processed, who provides the data, and who uses the output documents produced. However, several general steps in processing functions can be identified. These are:

- Information receipt--the point where data initially come into the system.
- Data entry--the process by which new data, usually from paper forms, are key entered into the computer system.
- Data edit--the process by which data from forms entered into the system are checked for accuracy and consistency.
- Compute and manipulate--the automated process by which input data are transformed into the required output data.
- Document production and mailing--the process of producing an output document and mailing it to the correct recipient.
- Corrections--the process of updating individual records, recomputing information, and producing a revised output document.

Exhibit 5-1 shows the interrelationship between these steps.

EXHIBIT 5-1

STEPS IN A STUDENT AID PROCESSING SYSTEM



5-4

The GSL reinsurance subsystem generally follows these steps. For example, concerning claims, data are first received and later key entered at SLPC. These data are then edited manually by SLPC and DPO staff and by machine at BCS. The system then computes the level of claim by guarantee agency. Finally, a check is issued and mailed to the appropriate agency. What is conspicuously absent, however, from the reinsurance processing function, is the corrections step. The capability to make positive and negative adjustments and then recompute the correct level of a claim does not exist. This is a major general system flaw in need of corrective action. This general system deficiency is primarily a result of inadequacies in the automated data processing system. Therefore, relevant corrective actions are presented in the section on data processing.

5.4 CORRECTIVE ACTIONS IN DPO

As discussed in the previous section, the major problems at DPO relate to inadequate staffing and resources and the absence of well-defined operating and quality control procedures. Corrective actions would, therefore, include:

- Increasing staff size, morale, expertise, and resources
- Developing Unit operating and quality control procedures and training staff in these procedures.

5.4.1 Staffing and Resources

Given the increasing volume of claims and collections, enhancement of Unit staff is a logical corrective action. Enhancements might take the form of increasing:

- The number of staff handling reinsurance claims and collections
- The management expertise and experience of senior staff
- Staff capabilities and qualifications in the area of accounting
- Staff grade levels
- Staff resources such as filing space.

Currently, the Claims and Collections staff includes an interim manager, two claims examiners, and one clerk. The size and expertise of this staff is inadequate

compared to the dollar volume it processes. Adding additional staff would ease some of the current processing burden, increase morale, and in turn, decrease error and increase overall efficiency. In addition, it would provide room for some upward mobility among staff within the Units. This should increase staff motivation, decrease absenteeism, and reduce staff turnover.

The staff must be supplemented in expertise as well as raw numbers. First, because of the increasing dollar volume being handled, the Units should be directed on a daily basis by an individual with prior managerial experience. Second, the level of expertise in the area of accounting should be increased. This can be accomplished by raising the knowledge of accounting principles across the entire staff through training, additional schooling, or rehires. Alternatively, it can be done by bringing in one mid-level staff person with prior experience or specialized training in accounting.

An additional corrective action is to upgrade present positions. The positions of the individuals currently doing the bulk of the hands-on processing of claims and collections are defined as clerk-level positions. This definition seems inappropriate in comparison to the impact that these staff members can have on the accuracy and efficiency of the reinsurance process. Upgrading positions can have one of two effects. First, it can potentially raise the morale and commitment of current staff. Second, it can help attract increasingly qualified staff to the Units as staff positions open. Either effect will be beneficial to the operation of the reinsurance process.

Finally, staff must have access to adequate supplies and resources. Interviews with current staff suggest that they feel they do not have adequate filing space. This makes locating supporting documentation often cumbersome and time consuming. This problem could be remedied either through additional file space or changes in filing procedures such as the use of microfiching of documents. Microfiching, however, was tried previously with little success according to current staff.

Comparing the corrective action of staffing enhancements to the evaluation criteria, it is adaptable to policy changes, compatible with delivery system redesign, and moderate in cost. The criterion of technical sophistication is not applicable.

Overall, the projected cost-effectiveness of staff enhancements is acceptable. This assessment is presented in Exhibit 5-2.

Despite their cost-effectiveness, corrective actions in the area of staffing may not be politically feasible. First, reductions in the ED budget make it unlikely that additional staff, more experienced staff, more appropriately trained staff, or upgraded staff can be brought into the Claims and Collections Units. Second, current positions were just recently downgraded based upon the perception that clerks could handle a majority of the reinsurance responsibilities.

Therefore, other avenues must be found for increasing staff productivity. An alternative that may have a similar effect to enhanced staffing is developing more rigorous operating and quality control procedures for current staff. This corrective action is discussed in the following subsection.

5.4.2 Operating and Quality Control Procedures and Related Corrective Actions

The Claims and Collections Units of DPO are involved in the processing and editing of 1189 and 1189-2 forms and resolving special problems related to the reinsurance process. Procedures governing the daily operations of the Units are somewhat informal and problem resolution is often done on an ad hoc basis. A critically needed corrective action is the design and implementation of rigorous operating and quality control procedures, as well as staff training in these procedures and development of a procedures manual.

OSFA recognizes the need for reinsurance operating procedures and, in fact, is currently completing the implementation of such procedures. In order not to duplicate this effort, the discussion of procedural corrective actions in this report is limited to a review of the OSFA-authored procedures. This review includes:

- An overall evaluation of these procedures
- Recommendations for additions to these procedures.

In addition, Advanced Technology developed a mechanism, a sampling plan, and summary tables for conducting a quality control check on how well the new procedures are being followed. These procedures are discussed later in this section.

EXHIBIT 5-2

COMPARISON OF DPO CORRECTIVE ACTIONS

EVALUATION CRITERIA	CORRECTIVE ACTION		
	STAFF ENHANCEMENTS	NEW PROCEDURES	AUTOMATING PROCEDURES
FLEXIBILITY TO ADAPT TO CHANGE	YES	YES	YES
COST	MODERATE	LOW	HIGH
TECHNICAL SOPHISTICATION	NOT APPLICABLE	LOW	HIGH
COMPATIBILITY WITH DELIVERY SYSTEM REDESIGN	YES	YES	YES
COST-EFFECTIVENESS EVALUATION	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

Evaluation of Operating Procedures

The project team has made the following general conclusions based upon the review of the new Claims and Collections Units operating procedures:

- The procedures address the major operational shortcomings of the Claims and Collections Units.
- The procedures are quite complex.
- Some marginal changes could be made to improve the procedures.
- Given the complexity of the operating procedures, it is of paramount importance that parallel quality control procedures be developed and instituted.

Review of the procedures suggests that they will have a significant impact on current problem areas such as staff accountability and program efficiency. In addition, they are consistent with most of the evaluation criteria developed to analyze corrective actions.

Concerning these criteria (see Exhibit 5-2), first, the proposed procedures are flexible enough that they could be adapted to policy changes. Changes in the mechanics of the reinsurance system could, in most conceivable cases, be dealt with through minor amendments to the procedures and updates to the procedures manual if one is developed.

Second, the procedures in no way inhibit the delivery system redesign initiative. However, it is possible that a redesign effort will attempt to automate many of the operations that are now conducted manually by the Claims and Collections Units. Automating these operations will give an artificially short life to the new procedures.

The issue of automation leads to the third evaluation criterion, technical sophistication. The procedures must be rated low on technical sophistication. It is certainly possible, although potentially quite costly, to automate many of the operations that are now being conducted manually.

Fourth, the procedures have been designed at low cost. The basic developmental cost component has been staff time. It is possible, however, that the

implementation costs, measured by such factors as a temporary dropoff in processing efficiency while staff learn the new procedures and staff resistance to the new procedures, will be somewhat higher.

Fifth, as already suggested, the procedures address most of the operating problems identified in the Claims and Collections Units. For example, the procedures can:

- Improve record keeping
- Provide audit trails
- Centralize the filing of supporting documentation
- Provide greater consistency in verifying collections check amounts against 1189-2 forms and claims amounts against 1189 forms
- Reduce duplicate payments
- Routinize rechecks of staff calculations resulting in fewer mispayments
- Improve documentation for and communication with OFMS.

Therefore, the procedures must be rated high on cost-effectiveness.

Overall, the manual procedures represent a cost-effective corrective action. Given their high responsiveness to current problems and low developmental costs, the returns from this corrective action should be great. The major limitation of this corrective action is that it is institutionalizing manual procedures that probably could be done more efficiently in an automated mode. Therefore, these procedures should be considered an interim step until the structural change of system automation can be introduced. Because of budget cutbacks, automating these procedures is not a likely short-term goal. Given this fact and the nature of current operational problems, implementing these procedures should be a high priority corrective action. Such implementation is now in progress.

There are some general drawbacks to the procedures. The primary limitation is the complexity of the procedures and related record keeping. The problem of complexity is compounded by the small size of the Claims and Collections Units staff. A very small number of individuals will be asked to perform a large number

of record keeping and edit functions. This may result in some initial reluctance to use the new procedures. Further, since a learning curve is necessary before the complex procedures can become a routine part of the Units' operations, a temporary decrease in productivity may result.

Several marginal changes can be recommended to reduce complexity and increase efficiency of the operating procedures. For example, all correspondence, claims, collections, and adjustments received by the Claims and Collections Units are recorded on a Master Control Log (MCL). As these items are processed, each step is recorded on the MCL. However, individual examiners typically do not notate the MCL directly. According to the procedures, examiners record processing steps on a Notification to Master Control Log and a log keeper transcribes these notations onto the MCL. The advantage of this process is that one individual is responsible for the MCL, which results in increased control over items on the log. The disadvantage is that claims examiners must deal with an additional form, and information about processing is written down twice, rather than once. Given the small size of the Claims and Collections Units staff, the duplication of effort and added burden of the Notification to Master Control Log outweigh its potential advantages. Therefore, discontinuation of the Notification to Master Control Log is recommended.

Second, several of the other logs utilized in the procedures contain information that is often not currently available. Although this information is useful to create a complete audit trail, current record keeping and data collection processes do not provide this information. Examples include some of the line item information requested on adjustments (e.g., new principal, original principal) and collections data (e.g., amount owed, is collection action needed?). As the new operating procedures are phased in, it will be less complex if these items which cannot be completed are omitted from the logs and user instructions. When sufficient documentation becomes available to provide these data, they can be reinstated.

Third, the procedures imply that telephone calls will be logged on the MCL. If the volume of telephone calls is substantial, recording each one on the MCL may be particularly time consuming or may clutter the log and reduce its utility. If recording of phone calls is time consuming and becomes a burden, examiners may begin to record telephone calls selectively based on normative judgment of their

importance. In anticipation of this problem, procedures could be developed clearly stating the types of phone calls that should and should not be recorded. Some examiner subjectivity will remain even if procedures are concisely written because all types of issues and problems cannot be predicted. Therefore, the Claims and Collections Units may find it more efficient not to log any telephone calls. However, if it is determined that the value of telephone calls is such that they must be logged, clutter can be reduced if a separate telephone log is created or if calls are recorded in a new column of the MCL next to the appropriate line item, rather than as a separate line item.

The subjectivity of selectively recording telephone calls suggests a fourth area in which the procedures can be improved. There are several places where procedures are not fully documented and staff discretion is required. These areas include:

- Assigning cases to examiners
- Correcting disparities resulting from accuracy checks comparing the claim amount on an 1189 with the sum of the ARP and ERP
- Identifying necessary documentation for adjustments
- Processing adjustments if the original claim number is not shown
- Selecting important telephone calls for recording on the MCL (if this process is continued).

At present, examiners perform these activities in an ad hoc manner, or a normative decision related to the activity is made by the Lead Claims Examiner. Providing written documentation on executing these procedures would reduce subjectivity and increase consistency, reliability, and accuracy. Reducing staff subjectivity, even at the expense of the time required to design detailed documentation, should be a goal of the new operating procedures. Therefore, the project team recommends that procedures be developed detailing:

- How individual cases should be assigned to examiners
- How disparities between a claim amount on an 1189 and the sum of the ARP and ERP should be resolved

- What documentation is necessary to provide an adequate audit trail for an adjustment
- How adjustments should be processed if the original claim number is not available
- Which telephone calls should be recorded by the claims examiners.

Fifth, some additional computations could be performed to verify the accuracy of claims payments and collections checks. Currently, Claims and Collections Units staff compare the consistency of the guarantee agency claims request on an 1189 form with the sum of the ARP and ERP. The information taken from the 1189 is line 5, total claim (see the facsimile of an 1189 form shown previously in Exhibit 2-3). Total claim is the sum of the 1189-1 form and the 1189-3 form, and, each of these forms is further broken down into component parts. The Claims and Collections Units' accuracy check assumes that these subtotals are computed correctly. Instead of making this assumption, three additional computations could be made to verify the accuracy of line 5, total claim. However, SLPC is supposed to balance all subtotals on the 1189. If this is being done, duplication of these computations is not necessary. Similarly, the following computations on the 1189-2 can be added to the procedures if SLPC is not currently performing this function:

- Sum of all line items can be determined and compared to line 20, total collections.
- Line 20, total collections, can be multiplied by the maximum allowable administrative collections cost (.30) to see if the Federal government is receiving its proper share of collections.

Sixth, the following marginal changes can be made to increase effectiveness of the procedures:

- Claims examiners are required to search the MCL to see if an incoming claim number appeared previously on the log, in order to prevent duplicate payments. Currently, no indication is made on the log to note the completion of this search. If this procedure is maintained, a checkoff should be added to the MCL to indicate execution of this search in order to make each examiner accountable for this procedure.
- Date of receipt of the computer reports (ARP, ERP, CRP) is indicated on the MCL in column 7. For all line items other than claims, computer reports are not applicable. Therefore, if NA is written in column 7 of

the MCL for non-claim line items, claims that are missing their appropriate reports can be easily determined (they are line items with no entry in column 7), and corrective actions can be implemented.

- For claims paid by electronic funds transfer, the transaction date is currently recorded in the MCL. Assigning and subsequently recording a transaction number would provide additional information if a problem resulted related to this payment.

Seventh, in order to assist with a recommendation made later in this paper, there is an extension to the new procedures which might be implemented. An additional form could be added to keep a running total of all claims and all the collections made against claims for a given quarter. Such totals would be updated at least every several days.

This process would eliminate the tedious procedure of compiling the extensive information on an as-needed basis. Also, using a form designed for this purpose would reduce the chances for error on the part of the Claims and Collections Units and ensure that the balances are not kept on scraps of paper which are accidentally discarded. It would probably not be worthwhile to keep running balances on the collections and offsets form since the volume of information kept on this form should never be very great.

The complexity of the operating procedures underscores the need for quality control procedures. Quality control procedures can assess whether the operating procedures are being executed properly and are having an impact on program performance. The project team has designed quality control procedures for the Claims and Collections Units. These procedures are discussed in the next subsection.

Quality Control Procedures

Advanced Technology has designed a quality control checklist for the Claims and Collections Units. This checklist provides a set of quality control procedures that parallel the new operating procedures. The quality control procedures serve three principal purposes. The procedures:

- Monitor how well the operating procedures are being executed

- Evaluate the accuracy of guarantee agency computations on the 1189-2 form and the level of claims payment error
- Measure the timeliness of the operating procedures.

Each of these procedures is extremely important.

First, the operating procedures have been designed to increase the efficiency and accuracy of the reinsurance process and to provide a complete audit trail. Assuming that the operating procedures conceptually fulfill this purpose, the degree to which efficiency and accuracy are achieved in practice should be directly related to how well the operating procedures are followed. The checklist monitors this process.

Second, the reinsurance process has been subject to significant error through overpayments and underpayments in the past. One source of mispayments is computational errors by guarantee agencies on 1189 and 1189-2 forms. The checklist verifies the accuracy of guarantee agency computations on the 1189-2 form. SLPC does a reliable job verifying 1189 accuracy, so these computations need not be duplicated on the checklist. A second source of error is the level of claims payments made by DPO to guarantee agencies. The accuracy of these payments is computed using the checklist.

Third, it is important that claims and collections be processed in a timely manner. Agencies filing reinsurance claims should not have to wait a long time for payment. Collections checks received from agencies should be recorded and deposited in an efficient manner. The checklist measures the timeliness of various steps in the processing system.

The quality control procedures will operate in the following manner. On a regularly scheduled basis (at intervals determined by the needs of DPO) a stratified random sample by type of document will be drawn from all line items on the MCL. Separate samples will be selected for 1189s, 1189-2s, adjustments, and correspondence and other documents. The sampling interval initially might be every other month to provide data that could help refine the operating procedures. The first such sample could be drawn as early as one month after initial phase-in. Data from

the first sample must be interpreted carefully, however. They should not be used as a baseline to assess adherence to procedures, since the staff is still in the process of learning the procedures. Rather, they should be used to locate areas where revisions to the procedures are necessary. Once procedures are well established, samples could be drawn on a quarterly basis.

A stratified sample is recommended to assure that an adequate number of each type of document is included in the analysis. This is important because the processing flow is slightly different by document type. Further, there will likely not be an equal number of line items on the MCL for each document type. Therefore, document types that occur less often (such as adjustments) may be underrepresented in a nonstratified sample.

There are two limitations to a stratified random sample. First, to provide statistically meaningful analyses within document types, the total number of cases selected will likely exceed the number chosen in a nonstratified sample. This will increase the time required to complete a quality control audit. Second, it will also take more staff time to select four separate samples than one general sample that includes all document types, since the type of document must be properly identified for each line item on the MCL.

Selection of documents for inclusion in each sample will be based upon an equal interval skip pattern. In other words, every n th line item will be selected for each document type. The actual skip interval will be determined by the:

- Desired size of the sample
- Amount of confidence DPO wants to have in its estimates
- Number of documents recorded on the Master Control Log each month for each document type.

If this latter figure varies significantly for any document type between quality control periods, the skip interval should likewise vary since the goal is to include an approximately equal number of sampled cases in each period. This will allow the accuracy of the sample to remain basically constant. The skip interval may also vary by document type since the size of the universe likely varies by type of

document and certain minimum sample sizes may be required to guarantee the desired level of accuracy.

The line item selected as the starting point for the skip procedure will be determined using a random number table. This will ensure that all line items have an equal chance for inclusion in the sample. A new random number will be drawn for each document type during any one sampling period and new random numbers will be selected at each subsequent sampling period.

It is not practical to examine all the claims, collections, adjustments, and correspondence and other documents submitted to ED each year to determine the frequency of processing errors. A sampling plan can be designed to avoid the time and expense of examining all documents. A review of selected or sampled cases facilitates projections about the total error rate of all documents, assuming that the selected cases were chosen randomly. The accuracy of estimates calculated from samples depends on three factors: the size of the sample, the amount of confidence DPO wants to have in its estimates, and the actual proportion of errors.

All samples have sampling error which is the degree that statistics calculated from a sample (such as averages and proportions) differ from what the same statistics would be if they were based on all members of the population. As sample size increases, the level of sampling error decreases. In other words, the larger the sample the more accurate the estimates derived from it will be. Most of the increase in accuracy comes from increasing the number of cases sampled; increasing the percentage of all cases in the sample increases accuracy of the estimates only slightly.

Since accuracy increases with sample size, certain decision rules must be established to determine when a sample is large enough to produce an acceptable level of accuracy without overtaxing available resources. The concepts of confidence intervals and confidence levels are typically used to establish these decision rules. The confidence interval is the range around a sample statistic within which the value of the population falls. The confidence level is the degree of certainty that a population parameter is within the established confidence interval. Larger sample sizes are needed for both narrow confidence intervals and higher confidence

levels; a combination of narrow confidence intervals and high confidence levels requires the largest samples.

Confidence levels are expressed in percentages. In a 95 percent confidence level, if 100 samples were taken from the same population, a sample statistic would be within the specified confidence interval of the population parameter in 95 of the samples. Similarly, any one sample has a 95 percent chance of being within the specified confidence interval of the population parameter.

Sample accuracy is also a result of the proportion of errors found. Estimates of error proportions around 50 percent are the least accurate. As error rates approach zero or 100 percent, the accuracy of the estimate increases, since there is more homogeneity in the population. Error rates around 10 percent can be estimated almost twice as accurately as error rates around 50 percent.

In order to choose an appropriate sample size, the Claims and Collections Units should ideally establish in advance a desired confidence level and confidence interval. Using these delimiters, they can then solve a mathematical equation which will identify the necessary sample size. However, staff availability and limited resources provide a practical limitation on the number of documents the Units can review. Therefore, an acceptable compromise between practical constraints and desired accuracy must be reached. The Claims and Collections Units may have to select a sample size that is practical and a confidence level that is appropriate and then work back to compute the resultant confidence interval.

Comparisons of statistics generated by two separate samples must be made carefully. This is a major concern, since DPO will be comparing error rates from one time period to another. Since any estimate based on a sample is likely to differ from the true value, comparisons between two estimates must take sampling error into account. For instance, if samples from two successive quarters show a decline in the proportion of claims with errors, one cannot be sure that there really was a decline. There is a chance that the rate was the same both times, but that it was overestimated by the first sample and underestimated by the second sample. The rate might even have increased. Therefore, DPO must examine the statistical significance of the difference between the samples.

Once the sample has been selected, cases will be divided equally among quality control auditors for review. Each auditor will obtain, at a minimum, the following materials for every sampled case:

- A checklist questionnaire with accompanying instructions and tables
- A photocopy of the Master Control Log
- A Guarantee Agency Ledger, Adjustments/File Maintenance Document, and Collections/Offsets Record
- The 1189, 1189-2, or correspondence entered on the Master Control Log
- All supporting documentation including additional correspondence, adding machine tapes, etc.
- The Accepted Claims Report, Rejected Transactions Report, and Summary for All Lenders Report
- The Notification to Master Control Log form indicating the date the document was initially sent to an examiner for review
- The cashier's records of payments received from guarantee agencies and a photocopy of the check received
- A Request for Payment form
- A paid copy of the Voucher and Schedule of Payments form
- A photocopy of the Certification Letter.

The auditor will then proceed through the entire checklist responding "Yes," "No," or "Not Applicable" to nearly all questions. Some questions require different responses. At the completion of each case, the reviewer will record the scores on the tabulation sheet of the checklist. The reviewer will indicate:

- The number and percent of errors in completing the Master Control Log, Guarantee Agency Ledger, and the combined Adjustments/File Maintenance Document and Collections/Offsets Record (These latter two logs are scored together since neither has enough items on its own to have a meaningful score.)
- Whether a discernible error was made in a claims payment and the amount of error
- Whether a computational error was made by the guarantee agency on the 1189-2 form

- Whether processing time was in or out of standard (and the total number of working days for processing) for the following processing steps:
 - Date SLPC receives the 1189 to the date DPO receives the 1189
 - Date DPO receives the 1189 to the date DPO receives the matching reports
 - Date DPO receives the 1189 to the date the voucher is sent to OFMS
 - Date the voucher is sent to OFMS to the payment certification date
 - Date SLPC receives the 1189 to the completion of processing
 - Date DPO receives the 1189 to the date collections action is begun.

At the completion of the quality control review, individual results will be aggregated on an Error Summary Sheet. This page will report the:

- Percent and number of cases outside of tolerance for each log
- Percent and number of line items outside of tolerance for each log
- Average percent error for each log
- Percent and number of claims payments in error
- Absolute and net dollar error for claims payments
- Percent and number of claims with overpayments
- Percent and number of claims with underpayments
- Percent and number of 1189-2 forms with computational errors
- Percent and number of cases outside tolerance for each timeliness measure
- Average number of days for processing at each measured processing step.

The Summary Sheet will also show data for past reporting periods. This will allow easy analysis of processing trends and the degree of improvement or decline in accuracy. Results from the current reporting period are set apart from the other data on the summary sheet by a box. This will permit these data to stand out so that current processing accuracy can be assessed. Since the MCL identifies which claims examiner processed each document, error by examiner can also be measured. This information can be used to increase efficiency and accountability.

Where appropriate, processing standards are included on the Error Summary Sheet. This facilitates analysis of processing efficiency.

In any summary analysis using data on different types of documents (such as the percent of cases outside of tolerance on the MCL, which includes data on the processing of claims, collections, adjustments, and correspondence and other documents), a weighting scheme must be introduced if the number of total cases for any document type differs. In such a case, true error is not simply the average of the mean error for each document type. Rather, weights must be used to correct for each document's actual contribution to total error. This can be clarified with a hypothetical example.

Assume only two types of documents are available, collections and claims. An auditor has calculated the individual error rates for collections and claims and wants to determine the overall error rate of their combined processing. The error rate is 40 percent for collections and 10 percent for claims. In addition, the error rate for collections was determined by sampling 50 cases out of a universe of 100 (a 50 percent sampling rate) and the error rate for claims was based on a sample of 50 cases out of 200 (a 25 percent sampling rate). Since considerably more claims are available than collections, claims processing should contribute more to overall error than collections processing. One viable weighting scheme is multiplying each error rate by the number of documents in their respective universes and dividing by the combined document total. This can be represented by:

$$\text{Tot} = \frac{E_{\text{CLM}}(N_{\text{CLM}}) + E_{\text{COL}}(N_{\text{COL}})}{N_{\text{CLM}} + N_{\text{COL}}} \text{ where}$$

Tot = Total error rate

E_{CLM} = Error rate for claims processing

N_{CLM} = Number of claims in the universe

E_{COL} = Error rate for collections processing

N_{COL} = Number of collections in the universe

For the preceding example, this would result in the following computation:

$$\text{Tot} = \frac{(.10)(200) + (.40)(100)}{200 + 100}$$

The computation results in a total error rate of .20. This is somewhat different from merely averaging the mean individual error rates which produces an unweighted total error rate of .25. The preceding computation formula can be easily adjusted to include all four document types.

The checklist itself has been designed to minimize error and maximize efficiency. First, all response categories are pre-typed, so the reviewer need only circle the correct response. This will result in fewer completion errors than if the reviewer had to write in the correct response. Second, items that require reviewing the same source document are grouped consecutively. For example, since the reviewer must look up the control number written on a source document and compare it to entries on both the Master Control Log and Guarantee Agency Ledger, these items appear one after the other. This will reduce rework and redundancies for the reviewer. Third, even though related items appear consecutively, their responses are placed in separate columns. For example, Part I of the checklist has separate response columns for each log. This will allow the reviewer to efficiently tabulate the results for each log by adding up the number of errors and total items in each column. Fourth, precise reviewer instructions are included with the checklist. This will also help to minimize reviewer error.

A typical quality control plan develops standards of performance and then measures performance to see if these standards are met. Standards should be realistic and achievable, yet should represent optimal production efficiency. There are various sources of standards. These include:

- Contract specific standards such as the requirement that SLPC must process each 1189 within three days of receipt
- Industry accepted standards
- Policy and statutory standards.

In cases where no current standards exist, new standards can be created by examining historical information on the processing function.

The quality control checklist must provide standards in the following areas:

- Permissible clerk error in completing each log
- Permissible error for guarantee agencies in completing 1189-2 forms
- Timeliness for various processing steps.

The project team has developed preliminary standards in each area. For completing each log, a standard of 10 percent permissible error is recommended. On 1189-2 forms, guarantee agencies must complete all computations correctly or else there is danger of an overpayment or underpayment. Therefore, for the purpose of the checklist, a zero error tolerance is recommended. Concerning processing timeliness, the following standards are proposed:

- Date SLPC receives the 1189 to the date DPO receives the 1189: 6 working days
- Date DPO receives the 1189 to the date DPO receives the matching reports: 2 working days
- Date DPO receives the 1189 to the date the voucher is sent to OFMS: 3 working days
- Date the voucher is sent to OFMS to the payment certification date: 2 working days
- Date SLPC receives the 1189 to the completion of processing: 13 working days
- Date DPO receives the 1189 to the date collections action is begun: 3 working days.

These standards are preliminary. Their reasonableness should be reviewed by DPO staff. Once final standards are established and the quality control process is implemented, DPO should consider making standards more rigorous. In addition, system changes should be introduced if they will result in increased productivity. These two approaches will motivate reinsurance staff to strive continually to improve performance, rather than merely seek to maintain the status quo.

A procedure operating outside of standard is a signal that a problem exists. In each such case, the audit team should conduct an analysis to identify the source of the problem. Once identified, a corrective action should be implemented to correct the problem. During the next audit period, system performance should be carefully remeasured to see if the corrective action had any impact.

DPO staff should use the Error Summary Sheet to compare quality control data from various time periods in order to identify whether a trend of decreasing performance is occurring. If so, an analysis of the causes should be initiated and corrective actions begun. In this way, corrections can be implemented prior to performance measures falling outside tolerable levels. DPO should not wait until performance is outside of standard before implementing corrective actions.

Exhibit 5-2 displays how the quality control checklist corrective action rates on each evaluation criterion. Quality control procedures can be highly beneficial and low cost while also being adaptable to policy change and compatible with delivery system redesign. It is probable, however, that if a delivery system redesign automates operating procedures, many quality control edits and processes will also become automated.

Additional Recommendations

In order to maximize the effectiveness of the new procedures, the following subsidiary products should be developed:

- A training program to instruct personnel on the new procedures
- A formal procedures manual that should be presented to all Claims and Collections Units staff.

The training program can help reduce the learning curve necessary for effectively implementing the new procedures. In addition to training current staff, all new staff should be trained in the procedures. The procedures manual will provide an ongoing resource for solving problems. It should be updated periodically as policy changes are implemented or as new operational problems arise. The existence of a procedures manual and staff training, if coupled with effective Unit leadership, will reduce the chance of reverting to informal operations and ad hoc problem resolution.

5.5 DATA PROCESSING CORRECTIVE ACTIONS

Corrective actions in data processing fall into two categories:

- Marginal
- Structural.

Marginal changes are basically enhancements to the existing data processing system. Structural changes involve a redesign of the current system. Marginal changes will typically cost less, but have a significantly lesser impact on correcting existing problems than will structural changes. As stated in the section on evaluation methodology, the project team has made two major a priori assumptions about corrective actions in the data processing area:

- The severity of problems in the current system ultimately requires structural corrective actions.
- Given the current political and budgetary environment, several marginal corrective actions may be efficient interim alternatives.

5.5.1 Recommendations for Marginal Corrective Actions

Although a complete system redesign is required to solve the major problems of the existing reinsurance system, there are certain short-term improvements which could be made without large expenditures of time or funds. Some short-term improvements have already been identified by OSFA and the current GSL processing contractor. Advanced Technology's recommendations focus on those which make the most significant improvements with the least effort and cost.

When deciding which improvements will be cost-effective, OSFA should consider how long it expects the current system to process data before it is replaced, what impact the modification will have on the current staff (e.g., will data entry at SLPC be affected?), and whether the change must be applied retroactively to old data to be a meaningful improvement. If the intention is to replace the present system in the near future, it will not be cost-effective to expend funds on costly improvements which will soon be part of a discarded system. If it will not be possible to allocate resources to allow for keying additional data or printing

additional reports, then it does not make sense to put features into the current system which would require this extra data processing work. Likewise, if it will not be possible to correct old data, it would be of limited value to implement a feature which uses previous years' data, as for example, a report on year-by-year trends in claims for the past six years.

The marginal improvements recommended in this report cannot be made without some cost, but given the severity of present problems, they all should prove to be cost-effective, even if the life expectancy of the current system is short. The six improvements which are recommended are:

- Addition of new fields and an update capability to the STACLM record so that adjustments can be made and tracked at the claim number level
- Establishment of an update capability for the STACOL file
- Establishment of an on-line query capability through the IDMS data base
- Utilization of the repurchase field on the current collections record
- Resequencing of some existing reports
- Addition of several new reports and efficient distribution of existing reports.

Addition of New Fields and an Update Capability to the STACLM Record

Adjustments at the claim number level could be tracked if two fields were added to the existing STACLM record. These fields would be: original claim amount and adjusted claim amount. In COBOL, the fields could be defined as follows:

05	ORIGINAL-CLAIM-AMOUNT	PIC S9(5)V99	COMP.
05	ADJUSTED-CLAIM-AMOUNT	PIC S9(5)V99	COMP.

To implement this change, the following steps would have to be followed sequentially:

- Add the indicated fields to the STACLM record definition, increasing its record length from 16 to 24.

- Execute a one-time summary run to add up all the claim amounts (OE-PAY-AMOUNT) on the STACOL records for a given STACLM record and load these amounts into the ORIGINAL-CLAIM-AMOUNT for that STACLM record. At the same time, initialize ADJUSTED-CLAIM-AMOUNT to zeros.
- Modify the program which currently updates STACOL in batch mode to update ADJUSTED-CLAIM-AMOUNT if 1189-1 or 1189-3 line items (STACOL records) are added to the STACOL file or updated.
- Modify or add report programs to use and report on the new data fields in the STACLM record.

Establishment of an Update Capability for the STACOL File

In the current system, it is not possible to change a STACOL record after it has been loaded into the data base. While an audit trail of changes to the non-financial data on a record is probably not too important, it is extremely important to track any changes or adjustments to the STACOL dollar amount fields.

A means of tracking changes to the STACOL dollar fields would be to add adjustment fields to the record. A program could be added to the reinsurance system which would update the STACOL file from a file of update transactions. To add this feature, the following steps would have to be followed sequentially:

- Add the following fields to the STACOL record. Allowances are made for five adjustments to each line item (STACOL record):
- | | | | |
|----|-------------------|-----------------|-------|
| 05 | ADJUSTMENT-DATA | OCCURS 5 TIMES. | |
| 10 | ADJUSTMENT-CODE | PIC XX. | |
| 10 | ADJUSTMENT-SIGN | PIC X. | |
| 10 | ADJUSTMENT-DATE | PIC S9(8) | COMP. |
| 10 | ADJUSTMENT-AMOUNT | PIC S9(5)V99 | COMP. |
| 05 | NET-PAY-AMOUNT | PIC S9(5)V99 | COMP. |

NET-PAY-AMOUNT is the net of all ADJUSTMENT-AMOUNTS and OE-PAY-AMOUNT.

- Design two update transactions for the STACOL file: one for non-financial data and one for financial data.
- Implement a new batch program which would edit these transactions and update the STACOL file from the edited data. A rejected transaction file, error listing, and error correction capability would also be required in this program.

- From the new batch program implemented in an earlier step, generate a report of all financial updates. This could be simply a listing of before-and-after STACOL record images together with the financial update transactions which changed the STACOL records.
- Establish procedures for the keying of update data from the update transaction forms.

Establishment of an On-Line Query Capability through the IDMS Data Base

The data base management system IDMS includes a software package named Data Management Language (DML) which can be used for user inquiries of IDMS files. Within OSFA there are several terminals which could be used for such queries, and with minimal effort GSL staff could be trained to use DML.

DML could be utilized to access the STACLM and STACOL files as well as Guarantee Agency Table #15, with retrieval based on a variety of search criteria. One could retrieve a single record with a given Social Security number or a group of records with the same claim number. Search criteria can also be combined. For example, one could retrieve a group of records for a certain state within a given disbursement data range and within a given payment dollar amount range. DML can also be used to generate simple reports on hard copy terminals.

The only real limitation on the use of DML is the nature of the reinsurance data base itself. The data stored there are incomplete in a sense because only the original entry, without subsequent changes, is stored. Also, summary level data are not present. DML would be more useful with a better reinsurance system, but there is every reason to make some use of it with the current system.

Utilization of the Repurchase Field on the Current Collection Record

At the current time, files of records derived from 1189-2 line items are being built at SLPC, even though there is no functioning reinsurance collection system to utilize these data. Apparently, no attempt is being made to record the fact that certain 1189-2 forms represent loan repurchases rather than regular collection activity. Repurchases are usually indicated by a notation on the 1189-2 itself or by an accompanying letter.

According to the current documentation, the record used to capture 1189-2 line items contains a one-character field called "SOURCE CODE" (position 26 of the record). An "R" in this field indicates a repurchase, while blanks indicate a regular collection. Data entry personnel should make an attempt to determine if 1189-2 forms represent repurchases and enter an "R" in the source code field for those items, if they are not doing so currently. Since DPO examines the forms before they are sent to SLPC, the actual determination could be done there, and an unambiguous notation could be made on the forms by DPO personnel so that SLPC data entry personnel would not have to interpret the forms.

Of course, entering an "R" is only the first step in tracking repurchases. For example, additional modifications would have to be made to the collections system so that repurchase data could be reported, if the system is not presently designed to do so. In addition, since a large volume of 1189-2 data has already been keyed without repurchase indicators, this is one instance where retroactive data correction is necessary to establish meaningful historical reporting.

Resequencing of Reports

At the time that Claims Unit personnel were interviewed during early March 1983, a problem concerning report sequence was noted. The ARP and ERP were not printed in schedule number order. Also, Claims Unit personnel thought the reports would be easier to use if the ERP for one schedule number immediately followed the ARP for that schedule number. Since that time, these problems have apparently been corrected by the GSL system contractor, and the Claims Unit believes that the reports are now in the most useful sequence.

Addition of New Reports and Efficient Distribution of Existing Reports

Even though the current system is limited by the nature of its data, several new reports, or new versions of existing reports, could be added. Also, existing reports should be more efficiently routed to interested users. For example, some DPPD staff said during interviews that they would like to have a report which showed how close each state agency was to the 5 or 9 percent default rate limits. In fact, such a report is being generated by the system. It is called the Reinsurance

Agreement Status (428A) Report (see Exhibit 5-3). If DPPD is not receiving this report, or is unaware that it is receiving it, this situation should be remedied. Some DPO staff also believe that it would be useful to produce the ARP, ERP, and CRP as a series of individual reports by state agency.

If new fields were added to the STACLM record as suggested in the first recommendation for marginal change, reporting could be enhanced. Exhibit 5-4 shows a sample report which could be generated from such an improvement. Likewise, if the second recommendation, establishment of an update/delete capability for the STACOL file were implemented, at least one additional audit-trail type report could be generated that could increase the accountability of the system (see Exhibit 5-5).

5.5.2 Evaluating Recommended Marginal Corrective Actions

Exhibit 5-6 shows how each data processing marginal corrective action rates against the evaluation criteria. Since these enhancements are compatible corrective actions, it is not necessary to compare the actions against each other. All the corrective actions are adaptable to policy changes (with the exception that this criterion is not relevant to the utilization of the repurchase field enhancement) and compatible with delivery system redesign. The primary differences relate to cost of implementation, cost of processing, and technical sophistication. Despite some differences in cost, the impact on problem resolution is significant for each corrective action. Therefore, all the recommended corrective actions are rated acceptable on the criterion of cost-effectiveness.

5.5.3 Recommendations for Structural Corrective Actions

There is no doubt that short-term quick fixes will not be adequate to permanently solve the deficiencies of the current GSL reinsurance system. A complete redesign of the system is necessary. A system redesign is basically equivalent to automating the new operational procedures being developed by OSFA. This subsection describes several options for a new system at the general design level. The most important aspect of this new design is schemes to restructure the data base files so that it will be possible to integrate claims and collections.

EXHIBIT 5-3

REINSURANCE AGREEMENT STATUS REPORT

REINSURANCE AGREEMENT STATUS (428A) FISCAL YEAR 79						REPORT PRODUCED 13-DEC-81	
AGENCY CODE	428A SIGNED	LOANS IN REPAYMENT	9X IN REPAYMENT	9X IN REPAYMENT	AMOUNT PAID AS OF 13-DEC-81	X PAID	A G E N C Y N A M E
736	YES	993,791,231.00	43,287,361.33	41,317,610.79	46,693,692.07	90	NEW YORK HIGHER EDUC SERVICES CORP
737	YES	18,481,837.00	924,891.85	1,663,363.33	394,049.98	100	STATE EDUCATION ASSISTANCE AUTH
739	YES	91,496,964.00	4,374,848.28	8,234,726.76	1,741,072.11	100	OHIO STUDENT LOAN COMMISSION
740	NO	.00	.00	.00	291,725.40	100	OKLAHOMA STATE REGENTS FOR HIGH ED
741	YES	32,881,878.00	1,648,893.30	2,932,168.30	988,892.30	100	OREGON STATE SCHOLARSHIP COMMISSION
742	YES	426,368,258.00	21,318,412.30	38,373,142.30	17,137,237.07	100	PA HIGHER EDUCATION ASSISTANCE AGCY
744	NO	.00	.00	.00	635,381.42	100	RHODE ISLAND HIGHER EDUC ASST AUTH
745	YES	999,999,999.00	49,999,999.95	89,999,999.91	.00	100	S.C. STUDENT LOAN CORPORATION
746	YES	999,999,999.00	49,999,999.95	89,999,999.91	.00	100	SOUTH DAKOTA EDUCATION ASSIST CORP
747	YES	69,319,922.00	3,465,796.18	6,238,432.98	972,461.28	100	TENNESSEE STUDENT ASSISTANCE CORP
748	NO	.00	.00	.00	.00	100	TEXAS COLLEGE & UNIVERSITY SYSTEM
749	YES	999,999,999.00	49,999,999.95	89,999,999.91	.00	100	UTAH HIGHER EDUC ASSISTANCE AUTH
750	YES	9,239,516.00	461,775.80	831,196.44	341,930.73	100	VERMONT STUDENT ASSISTANCE CORP
751	YES	42,248,585.00	2,112,425.25	3,882,365.45	612,871.08	100	VIRGINIA STATE EDUCATION ASST AUTH
755	YES	92,663,984.00	4,633,189.20	8,339,758.56	2,582,186.41	100	WISCONSIN HIGHER EDUCATION CORP
781	YES	999,999,988.00	49,999,999.00	89,999,991.00	.00	100	VIRGIN ISLAND BOARD OF EDUCATION
836	YES	33,689,746.00	2,684,487.38	4,832,877.14	1,883,470.48	100	UNITED STUDENT AID FUND INC
YES =	36	13,845,762,336.00	792,288,116.88	1,426,118,810.24	116,304,199.38	***** T O T A L S *****	
NO =	6						

5-31

EXHIBIT 5-4

ADJUSTMENTS TO CLAIMS REPORT

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

MM/DD/YY

STANDARD STUDENT LOAN PROGRAM

PAGE XX

REMARKS

ADJUSTMENTS TO CLAIMS REPORT

AGENCY: XXX

CLAIM NUMBER: XXXXXXXXX

ADJUSTMENT RATE	ADJUSTMENT CODE/REASON	P/L	ADJUSTMENT AMOUNT
XX-XX-XX	XX-XXXXXX	X	XXXX.XX
XX-XX-XX	XX-XXXXXX	X	XXXX.XX
XX-XX-XX	XX-XXXXXX	X	XXXX.XX

TOTAL ADJUSTMENTS: 1 XXXX.XX

ORIGINAL CLAIM PAYMENT: XXXX.XX

ADJUSTED PAYMENT: XXXX.XX

ADJUSTED TOTALS

ORIGINAL CLAIMS PAYMENT AMOUNT: XX,XXX,XXX.XX

TOTAL ADJUSTMENTS: 1,XXX,XXX.XX

TOTAL NET PAYMENTS: XX,XXX,XXX.XX

STACOL UPDATE REPORT

STACOL UPDATE REPORT

[illegible]

EXHIBIT 5-6

EVALUATION OF DATA PROCESSING
MARGINAL CORRECTIVE ACTIONS

EVALUATION CRITERIA	CORRECTIVE ACTION					
	ADDITION OF NEW FIELDS TO STACLM	UPDATE CAPABILITY FOR STACOL	ON-LINE QUERY	UTILIZATION OF REPURCHASE FIELD	RESEQUENCE OF REPORTS	NEW REPORTS
FLEXIBILITY TO ADAPT TO CHANGE	YES	YES	YES	N/A	YES	YES
COST OF IMPLEMENTATION	MODERATE	MODERATE	LOW	LOW	LOW	MODERATE
COST OF PROCESSING	MODERATE	MODERATE	MODERATE	LOW	LOW	MODERATE
PROCESSING EFFICIENCY	MODERATE	MODERATE	N/A	N/A	N/A	N/A
TECHNICAL SOPHISTICATION	MODERATE	LOW	HIGH	N/A	N/A	N/A
COMPATIBILITY WITH OVERALL SYSTEM REDESIGN	YES	YES	YES	YES	YES	YES
COST-EFFECTIVENESS EVALUATION	ACCEPT.	ACCEPT.	ACCEPT.	ACCEPT.	ACCEPT.	ACCEPT.

The design proposals assume that either the current data base management system (DBMS), which is IDMS, or another DBMS which supports network record relationships will be in use at the time of the implementation of the redesigned system. The presentation of this preliminary design describes the system at a very general level. It is not intended to cover all aspects or details completely.

Two basic data entry options, two editing options, two update options, and four data base file structure options are proposed. There are 12 feasible permutations of these options. Trade-offs between cost and efficiency exist with each permutation, but each of the 12 possibilities will include the following features which solve most existing shortcomings:

- Positive or negative adjustments may be made to a claim at time of entry or afterward.
- Nonfinancial data may be corrected after entry (changes to financial data are always made as adjustments for audit purposes).
- All adjustments are retained at the detail level to establish an audit trail.
- Claims may be entered for additional defaults after the first on the same loan (as in the case of repurchases).
- Collections from loan defaulters can be reconciled against claims (at the SSN level).
- Collections from guarantee agencies due to overpayments by ED can be reconciled against claims at the claim number level, and balances due ED or agencies can be determined.
- Repurchases can be tracked.
- There is an automated interface with OFMS and the Treasury Department.
- Reporting is improved.

In addition, two features will enable the new system to be integrated into a possible overall delivery system redesign. First, in the process of data validation at entry or edit time, it will be possible to include an access to a nationwide student aid recipient data base to verify that all borrowers (or a sample of borrowers), for whose defaults state agencies are claiming reimbursement, are legitimate. Second, provision is made for the system to update the student aid recipient data base with default data so that lenders or state agencies can evaluate potential borrowers more carefully using a nationwide base of information, rather than merely a state-wide base.

The System in General

Exhibit 5-7 shows the combinations which are possible given the 10 options noted earlier. Before examining the options in detail, the system will be described as a unit in general terms. Exhibits 5-8 through 5-13 are a graphic representation of the various options combined into functioning systems.

Data from the 1189, 1189-1, 1189-2, and 1189-3 forms will be entered either through a CRT or onto storage media by key-to-disk (or tape) methodology. The data will be edited either while being entered on-line, or later by a batch computer job. Valid transactions will be added either to separate collections and claims files or to one file containing both types of records. A state-by-state guarantee agency table will also be updated with each run to determine if each agency is within the specified default limits for given reimbursement rates. There are modules for generating reports and also modules to provide data to OFMS, to provide notices to the Treasury Department if electronic fund transfer (EFT) is used, and to update the proposed national student data base with defaulter data.

Data Entry Options

The two options for data entry are on-line and key-to-disk (or key-to-tape). On-line data entry would employ terminals directly linked to the computer mainframe. Key-to-disk (or tape) technology uses off-line machines into which data are keyed and which generate disk or tape files of raw data which are later used as input to the application system. Most key-to-disk machines have the capability to perform rudimentary editing of data fields.

EXHIBIT 5-7

POSSIBLE COMBINATIONS OF THE DATA ENTRY, EDITING, UPDATE, AND DATA BASE FILE ALTERNATIVES

Option Combination Number	<u>Data Entry</u>		<u>Editing</u>		<u>Update</u>		<u>Data Base Files</u>				Exhibit Reference
	Key To Disk	On- Line	Batch	On- Line	Batch	On- Line	Separate Linked Aggregate Records	Separate Linked No Aggregate Records	Separate Not Linked	Combined	
1		X		X	X		X				5-8
2		X		X	X			X			5-8
3		X		X	X				X		5-8
4		X		X	X					X	5-9
5	X		X		X		X				5-10
6	X		X		X			X			5-10
7	X		X		X				X		5-10
8	X		X		X					X	5-11
9		X		X		X	X				5-12
10		X		X		X		X			5-12
11		X		X		X			X		5-12
12		X		X		X				X	5-13

EXHIBIT 5-8
SYSTEM DESIGN OPTIONS 1, 2, AND 3

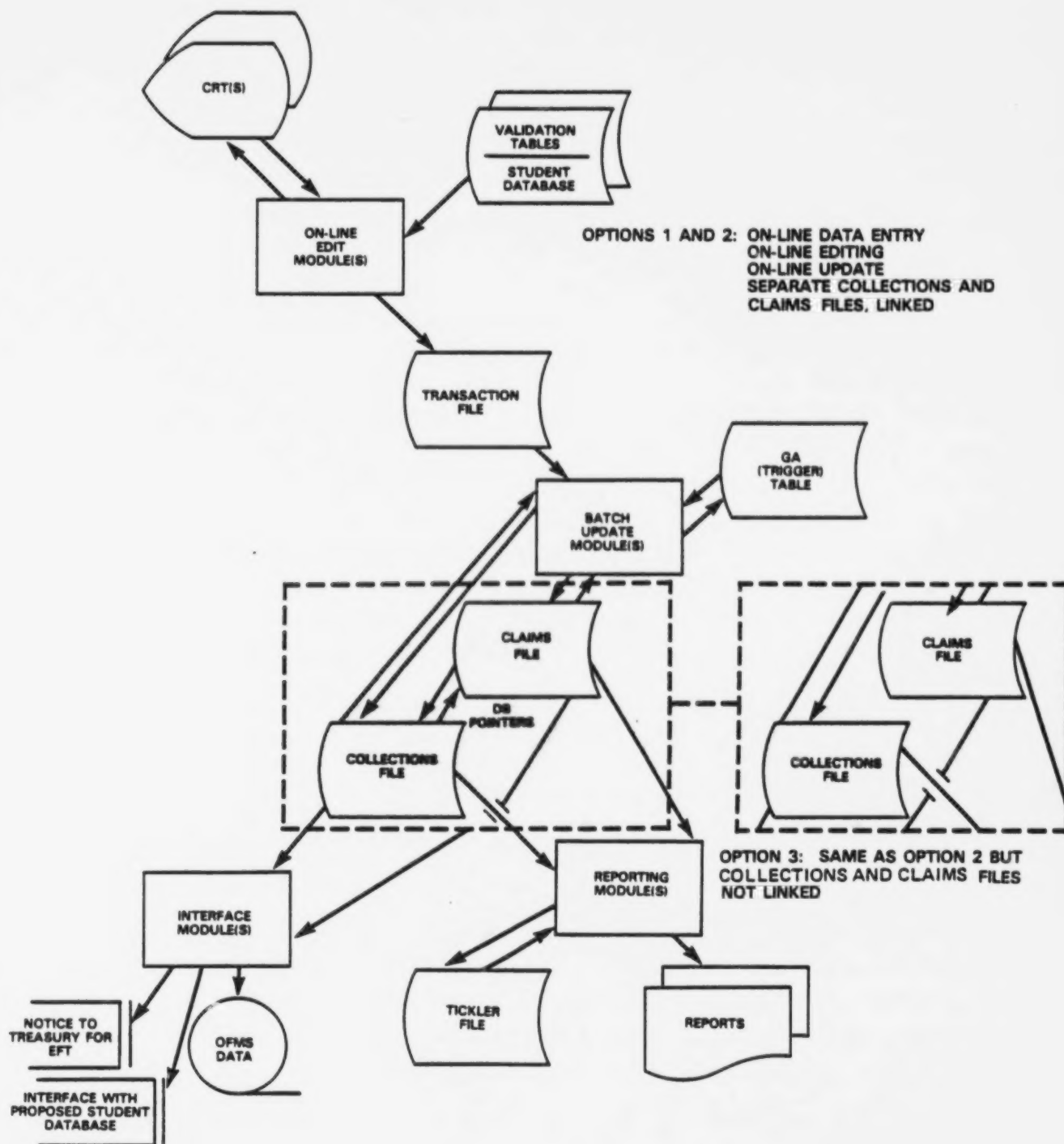


EXHIBIT 5-9
SYSTEM DESIGN OPTION 4

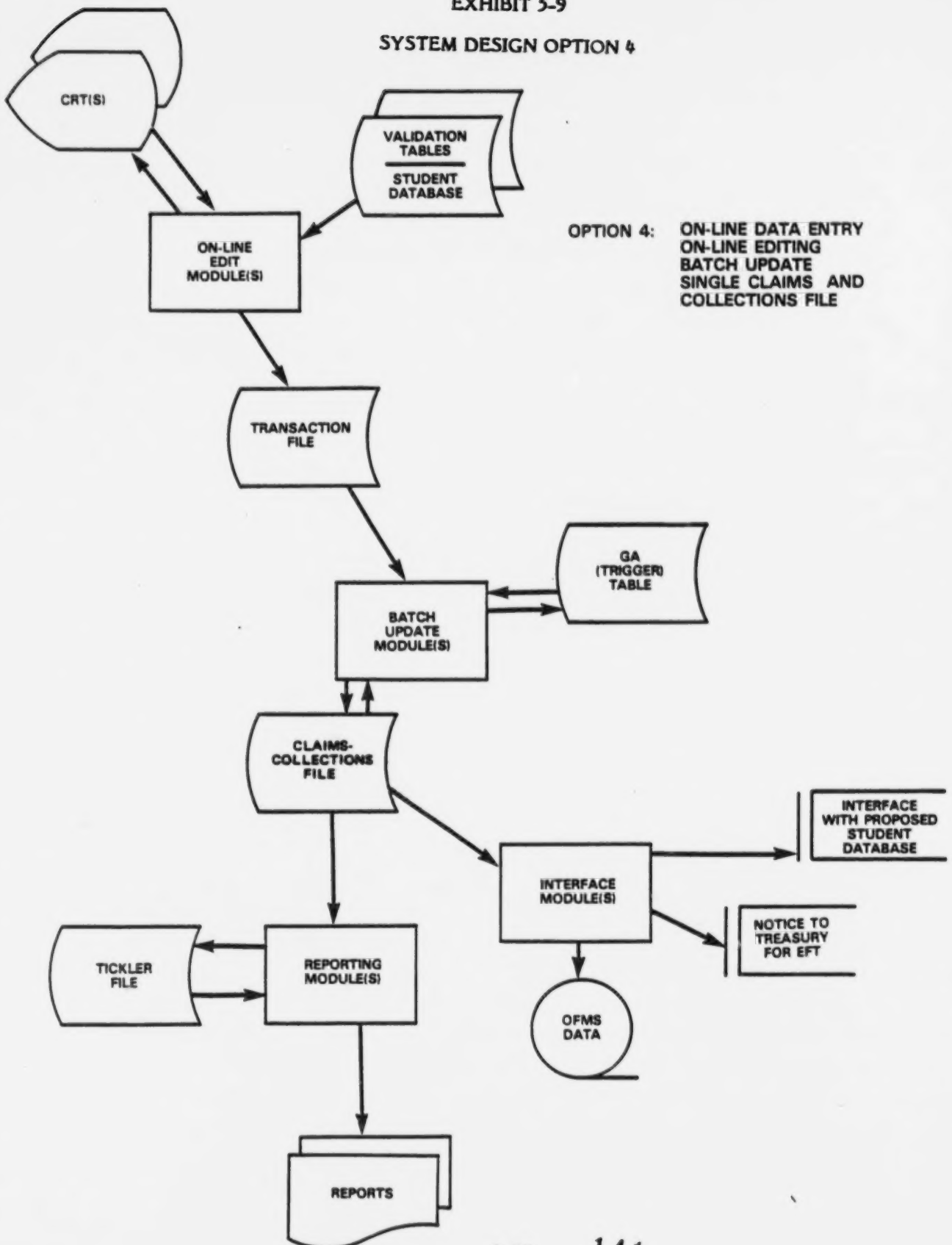


EXHIBIT 5-10
SYSTEM DESIGN OPTIONS 5, 6, AND 7

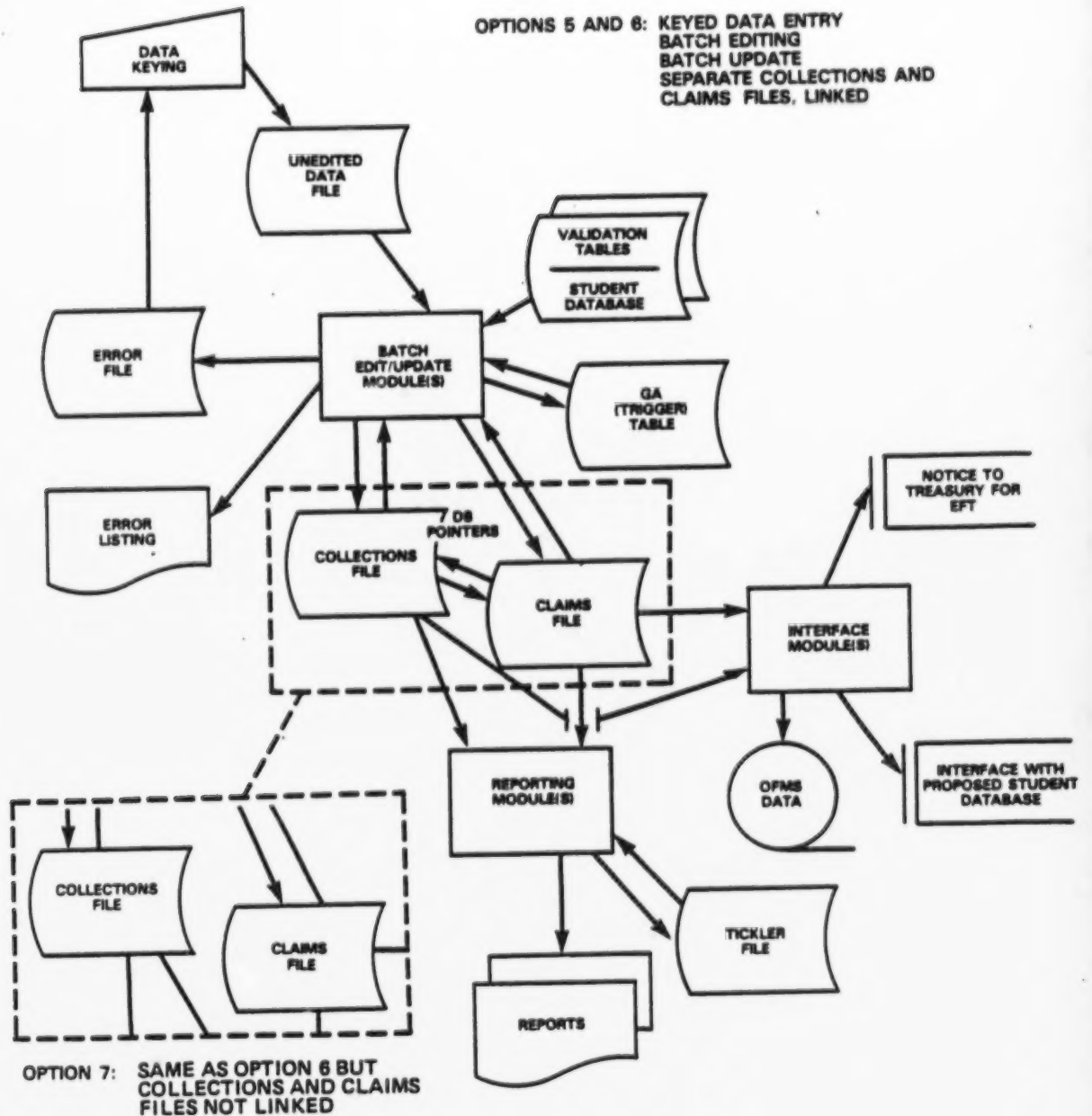


EXHIBIT 5-11
SYSTEM DESIGN OPTION 8

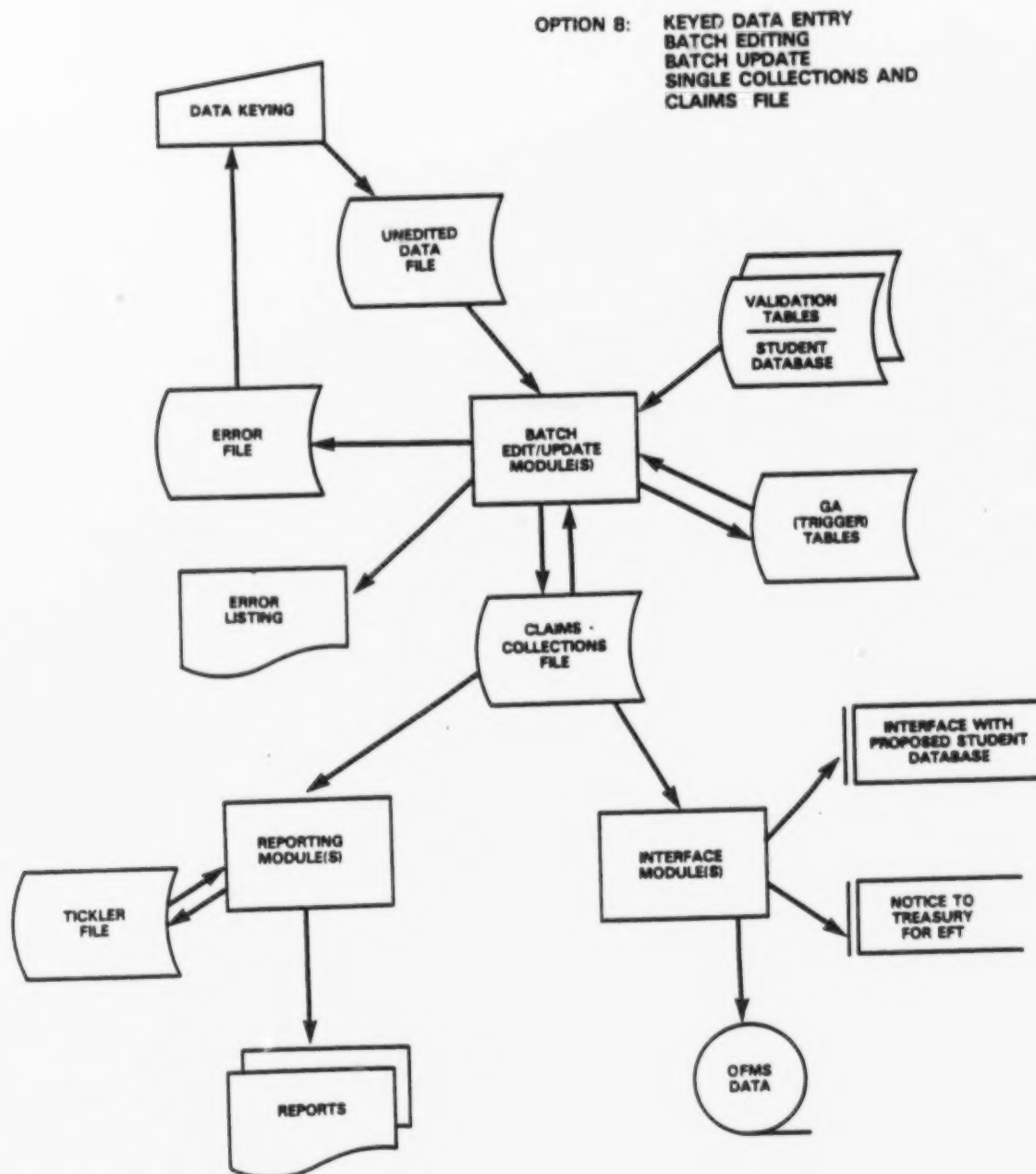


EXHIBIT 5-12

SYSTEM DESIGN OPTIONS 9, 10, AND 11

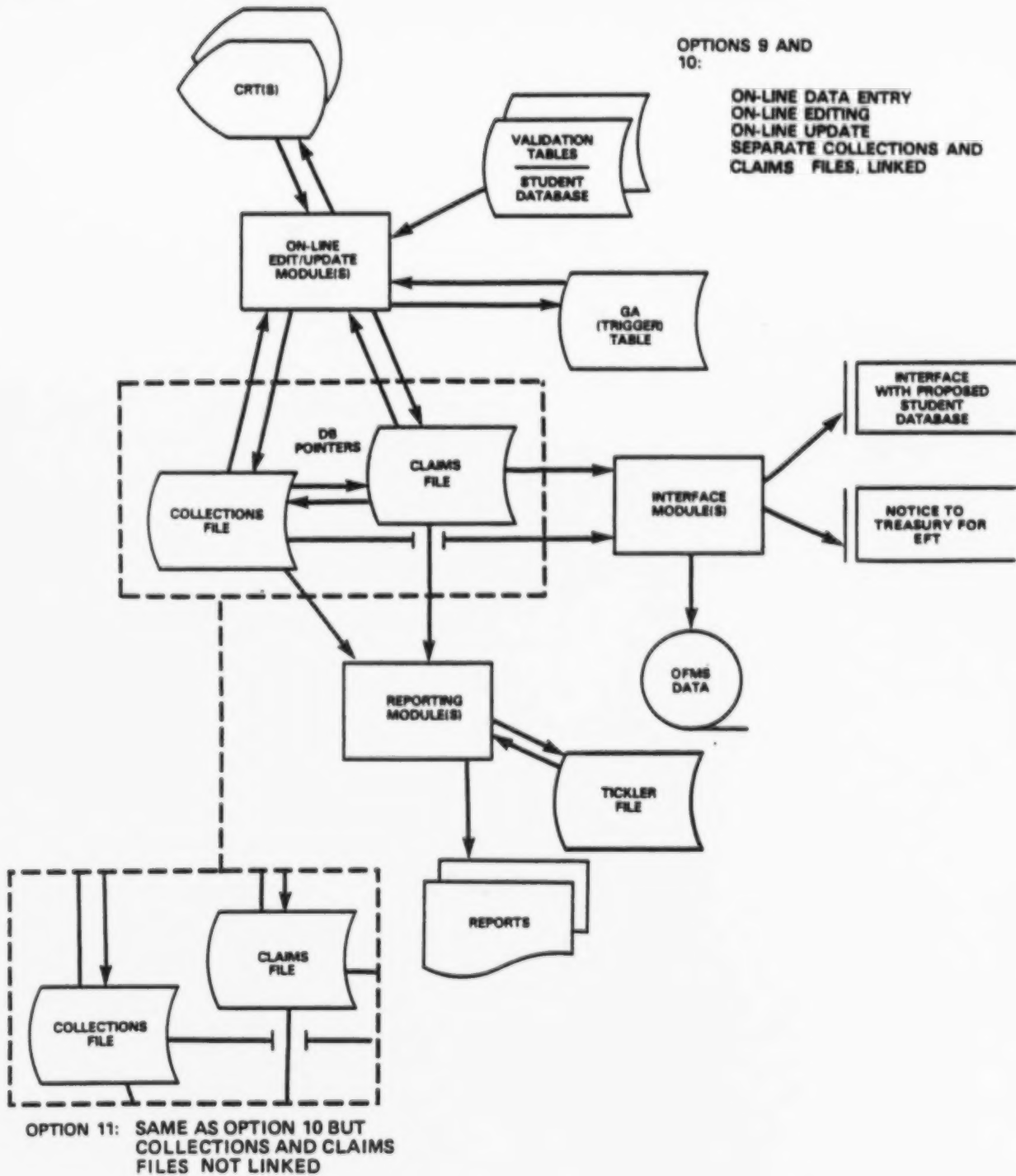
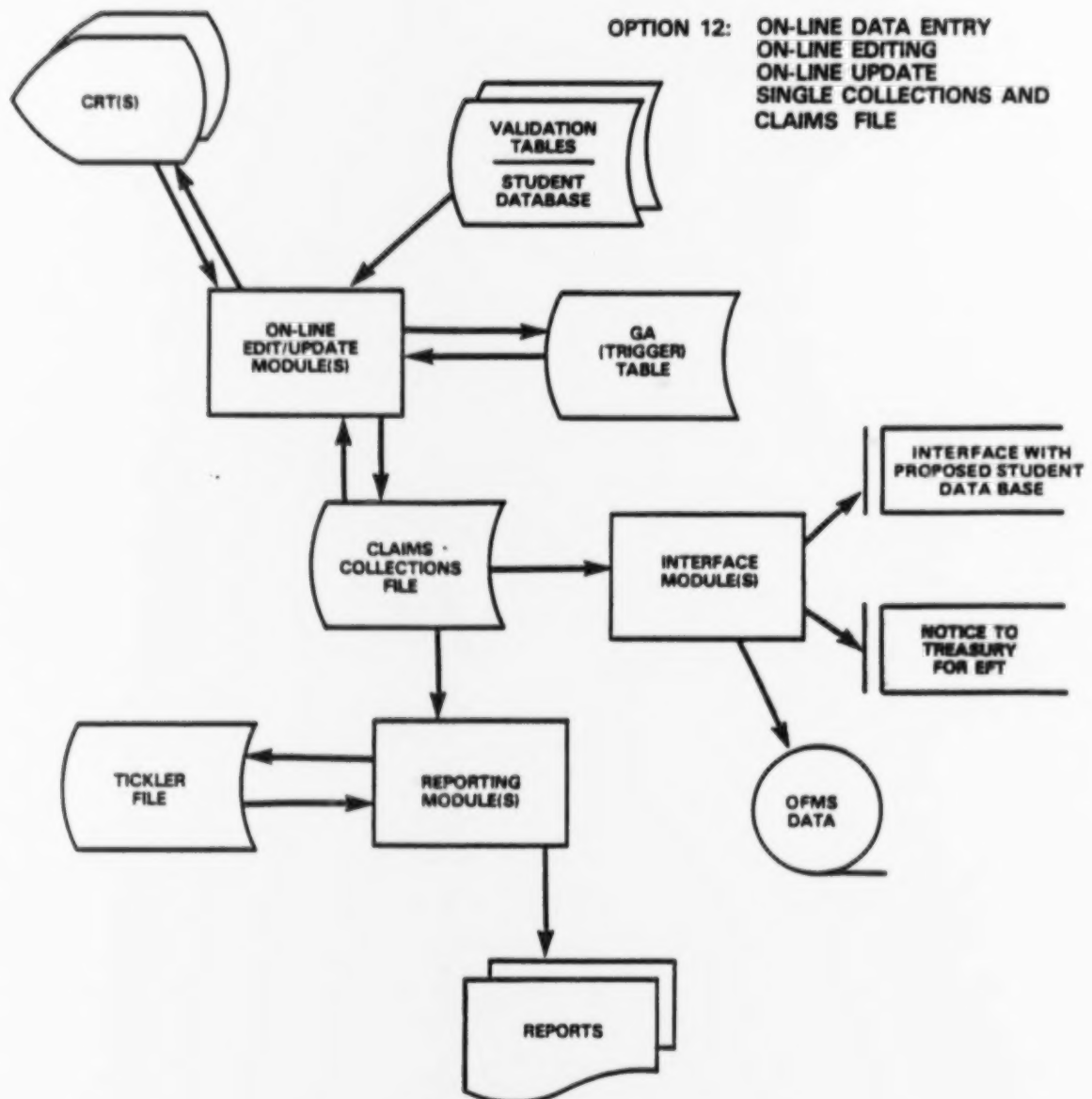


EXHIBIT 5-13
SYSTEM DESIGN OPTION 12



The primary advantages of on-line data entry are immediate editing and error-correction capabilities and the probable elimination of the need for file storage space for raw data files. Its primary disadvantages are cost and inability to enter data if the system is down. Key-to-disk data entry is more economical than on-line data entry in terms of the costs associated with the time spent on-line; however, since key-to-disk entry introduces several more steps into the data purification process, its real economy is questionable in many applications.

Editing

The two options for editing are on-line and batch. In order to keep the system as streamlined as possible, on-line editing and on-line data entry are only being considered in combination with each other. The same is true of key-to-disk data entry and batch editing.

With the on-line editing option, the validation of data entered into the terminal is performed immediately, and error messages are returned within seconds to the operator for prompt resolution. Using the batch option, a file of unedited data is passed through a program (or programs) executed in a batch job. An error listing is generated and error correction is performed after the batch edit job. The edit job is usually then rerun to verify that all errors have been corrected. The major advantage of on-line editing is the rapid turnaround time it provides for error correction. It also would most likely improve the efficiency with which errors are corrected since the error message is generated directly back to the person who did the data entry. Its major disadvantage is cost. It is always more costly to perform a task at the priorities assigned to on-line response rather than batch job submission. Of course, while being less expensive in terms of computer time, the extra elapsed time needed for batch editing may make it less economical than on-line editing in some applications.

Update Functions

As with editing, the two options for file update are on-line and batch. On-line (or interactive) updating is proposed only in combination with the on-line data entry and on-line editing options. With on-line update, the additions, changes, and deletions to the claims and collections files (or combined file) are made while the user is signed on to the system. With batch update, a file of edited transactions is

used to update the claims and collections file. The update job is submitted in batch mode either after a transaction file has been created through an on-line data entry/edit session or after being generated by a batch edit run. The chief advantage of on-line update is that the job normally required in batch mode to perform the update is eliminated, thus accelerating the entire process. It also allows the newly altered file to be queried or accessed immediately for reference or editing purposes. Its main disadvantage is cost. While batch updating is more time consuming, it should be less costly, and with IDMS as a DBMS, may make file recovery after a system failure easier.

Data Base File Structure

There are four options for data base file structure. Any one of the four options could be used with any permissible combination of the six data entry, edit, and update options discussed previously. The basic feature of all four file structure options is a master claims record with associated claims adjustment records and a distinct collections record. Three of the four file structure options utilize a separate claims and collections file. The fourth option combines the two main record types, claims and collections, into a single file.

With the records in separate files, there are a number of different ways of structuring the files and records. Of all the alternatives, three appear to be the most desirable ways to build the data base. The basic choices in these options are whether or not the claims file will contain aggregate records which summarize all the individual student records under a single claim number and whether the records in the collections file will be linked to the corresponding records in the claims file. When a DBMS, such as IDMS, is being used it is possible to establish relationships between groups of records so that when a given record is being accessed in a computer program a related record or records of a different type can be easily found. For example, if the relationship between the claims and collections data base files were established in the proper way, it would be possible to locate directly all the collections records for a given claim, either at the Social Security number or claim number level. If this relationship, which is basically transparent to the user, had not been established, it would be necessary to read through collections records until the correct one is found.

Exhibit 5-14 is a graphic representation of the claims file with no aggregate records. The first record in the file is a master claims record which is the equivalent to a line item on the 1189-1 or 1189-3 form. The record number for a master claims record is always 1. Following the master record are adjustment records which indicate positive or negative changes in dollar amount which are applied against the original master record. The adjustment records are keyed in the same way (claim number, SSN, disbursement date, and record number) as the master record, and carry record numbers from 2 on. These adjustment records also carry an adjustment code to indicate why the adjustment was made, and a positive/negative indicator. There are fields on the master record to hold the original dollar amount of the line item and the continually updated net amount after adjustments.

Adjustments are frequently made from an 1189 form against a series of 1189-1 and 1189-2 line items at the claim number level. This can be done using the scheme in Exhibit 5-14 by creating adjustment records with a dummy SSN (such as 999-99-9999) and possibly a dummy disbursement date. The last record in the diagram is an example of this. Multiples of this type of adjustment can also be made by sequencing the record number from 2 on. When the net amount for any claim is needed, it would be necessary to read and add up all the individual master claim records for that claim and then apply the claims-level adjustment record(s). This file structure enables every adjustment to be tracked.

Exhibit 5-15 shows a modification to this structure. The claims file carries aggregate or summary records for each claim. The aggregate or summary records have dummy SSNs. There could be adjustment records for each master claims record, although these are not shown. Claims-level adjustment records are then associated with the aggregate claims record. Each time an individual master claims record is added or updated, the corresponding aggregate record is also updated and carries a "running total." Although this file would carry many more records than the option without aggregate records, it would have a significant advantage over that file because it would not be necessary to read through and add up all the individual line item records to know the net amount of a claim. This would be particularly advantageous during on-line query.

EXHIBIT 5-14

CLAIMS RECORD WITH ADJUSTMENTS, NO AGGREGATE RECORDS

KEY

	Claim No.	SSN	Disb. Date	Record No.	Original Dollar Amount		Net Dollar Amount	Other Claims Data
					+ -	Adj. Code		
Master Claims Record	01			01				
	01			02			Dollar Amt.	
Subsequent Adjustments	01			03				
	01			04				
	01			05				
	01			06				
Adjustment to Prior Claim At Time of Entry of 1189	02	999-99-9999	00-00-00	02				

5-47

EXHIBIT 5-15
AGGREGATE CLAIMS RECORDS

RECORD
NO.

MASTER

CLAIM 01	SSN 000-11-1111	DISB. DT. MM-DD-YY	01	ORIGINAL DOLLAR AMOUNT	ADJUSTED DOLLAR AMOUNT
-------------	--------------------	-----------------------	----	------------------------------	------------------------------

5-48

MASTER

CLAIM 01	SSN 000-11-2222	DISB. DT. MM-DD-YY	01	ORIGINAL DOLLAR AMOUNT	ADJUSTED DOLLAR AMOUNT
-------------	--------------------	-----------------------	----	------------------------------	------------------------------

AGGREGATE

CLAIM 01	SSN 999-99-9999	DISB. DT. MM-DD-YY	01	AGGREGATE DOLLAR AMOUNT	ADJUSTED AGGREGATE AMOUNT
-------------	--------------------	-----------------------	----	-------------------------------	---------------------------------

ADJUSTMENT
TO AGGREGATE
(AT TIME OF
ENTRY OF
SUBSEQUENT 1189)

CLAIM 01	SSN 999-99-9999	DISB. DT. 00-00-00	02	$\pm$	ADJ. CODE	DOLLAR AMOUNT
-------------	--------------------	-----------------------	----	-------	--------------	---------------

Exhibit 5-16 shows a proposed general structure for the collections record. There are two basic types of collections. The first, and most common type, comes in with 1189-2 forms and can be applied at the SSN level. These are collections made by guarantee agencies on defaulted loans. The second type is collections due ED from guarantee agencies usually because of earlier overpayments to the agencies. The key structure of the collections record must be multipurpose so that it can use some number other than SSN to track these collections. Many times these collections can be tracked at the claim number level, and this can be used in the record key. A control number would have to be used to track collections which could not be broken down into collections against individual claims. If at all possible, use of a control number in the key should be avoided since it would be very difficult to associate these collections with corresponding claims using the automated system.

Exhibit 5-17 is a diagram of the ways in which the claims - collections relationships could be established. Since IDMS supports a network structure, many-to-many relationships are possible. That is, one claims record could be linked to several collections records or one collections record could be linked to more than one claims record. Using IDMS terminology, the project team recommends that the claims record be the "owner" and the collections record be the "member." As the diagram indicates, collections records could be linked to corresponding claims records at the SSN or aggregate claim number level. The exhibit shows both record types carrying SSN and/or claim number. In fact, in an ideal data base system, only the "owner" claims record should carry this information, since elimination of redundancy is the goal of data base management. However, this goal is not always achieved, and it may in fact be necessary to include the redundant data on the collections records so that they can be accessed separately from the claims file, if necessary.

One of the options is to maintain separate claims and collections files with no relationships established at all. This is proposed because there are overhead considerations involved in all the record linkage schemes just discussed. When a record-to-record relationship is established in IDMS, at least one of the record types involved must be increased in length enough to carry the pointers (fields which serve as internal addressing mechanisms for file-to-file cross reference) needed by the

EXHIBIT 5-16
COLLECTIONS RECORD

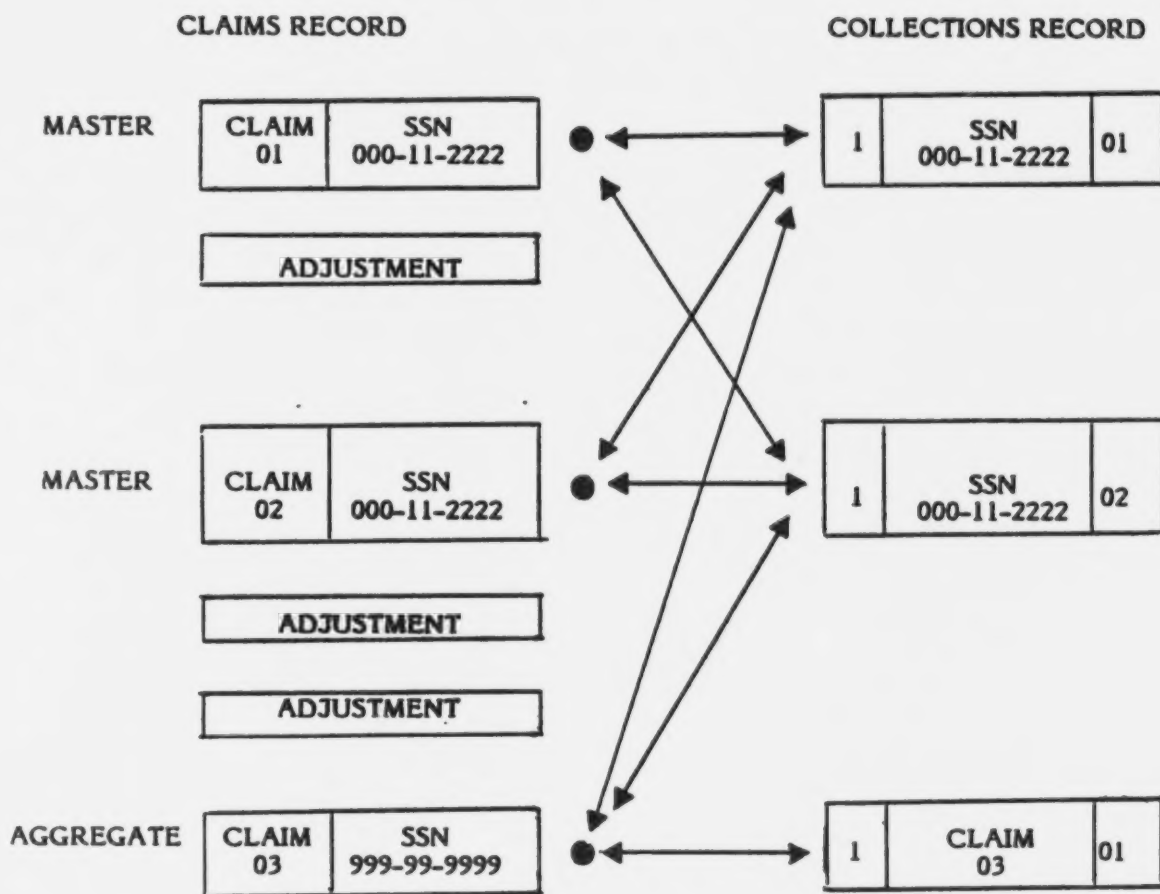
		KEY				NAME/ CONTROL NUMBER	AMOUNT	OTHER COLLECTION DATA
C O L L E C T I O N	T Y P E	SSN/ CLAIM NUMBER/ CONTROL NUMBER	C O L L E C T I O N	N U M B E R	W I T H I N C L A I M			

Collection Type 1 = Borrower Collection
Key = SSN, Collection Number
Name in Name/Control Number Field

Collection Type 2 = Other Funds Due ED
Key = Claim Number, Collection Number
Control Number in Name/Control Number Field

EXHIBIT 5-17

MANY-TO-MANY RECORD RELATIONSHIP



DBMS. Increased record lengths mean increased storage capacity requirements. However, even though it involves more system overhead, both in terms of on-line storage and computer processing time needed to read across files, there is an advantage to maintaining IDMS record relationships since this would greatly facilitate reconciling collections to the original claims against which they are being made. The difficulty in judging the validity of a given collection from an agency has always been a major weakness of the reinsurance system and this option would do much to solve it.

During the actual system redesign, it will be necessary to analyze all the trade-offs connected with establishing record relationships. This is a complex procedure and beyond the scope of this report. At the present time, it seems more advantageous to use linked claims and collections files than to use files which are not linked. However, deciding which of the specific relationships are the best among all the possibilities shown in Exhibit 5-17 can only be done through a detailed analysis.

The last data base file structure option proposed is a single file containing both claims and collections records (see Exhibit 5-18). Its primary advantages are that, in many ways, it is easier to work with one file rather than two, and there is some storage space saving. However, carrying both record types in one file necessitates a complex key structure. In this case, the collections records can no longer easily use one field for either SSN or claim number. If two different fields are employed, the field which is not being used as part of the key must always be set to some dummy value (shown as zeros in the diagram). This generates serious programming and query complexities, and the disadvantages of these almost certainly outweigh the advantages of this option. Therefore, although a combined claims/collections file is feasible and has been presented as an option, it is one of low desirability.

Evaluating Options for Structural Corrective Actions

Exhibit 5-19 summarizes the advantages and disadvantage of each of the 12 option combinations. Exhibit 5-20 compares each option to the evaluation criteria. As the exhibits show, there is a general trade-off between cost, on the one hand, and processing efficiency and technical sophistication, on the other. In most cases,

EXHIBIT 5-18

COMBINED CLAIMS/COLLECTIONS FILE

Record Type	Collection Type	Claim Number	SSN	Disb. Date	Master-ADJ/ Collection Number	Other Claims/Collection Data
D	0	01	111-22-3333	01-02-80	01	
D	0	01	111-22-3333	01-02-80	02	
D	0	01	111-22-3333	01-02-80	03	
D	0	02	111-22-3333	02-05-80	01	
D	0	02	111-22-3333	02-05-80	02	
D	0	02	111-22-3333	02-05-80	03	
C	1	00	111-22-3333	00-00-00	01	
C	1	00	111-22-3333	00-00-00	02	
C	1	00	111-22-3333	00-00-00	03	
C	2	02	000-00-0000	00-00-00	04	

KEY

EXHIBIT 5-19

DESIGN OPTION ADVANTAGES AND DISADVANTAGES

Option		Advantage	Disadvantage
Data Entry:	Key-to-Disk	- Low cost - Data can be entered if system is down	- Extra steps in data purification process - Storage space required for raw data files
	On-Line	- Immediate editing and error resolution - Raw data file small or non-existent	- Higher cost - Can not enter data if system is down
Editing:	On-Line (Interactive)	- Rapid turnaround - More efficient error correction - Elimination of error listings	- High cost
	Batch	- Low cost	- Slows down error correction - Need to generate error listings
Update:	On-Line (Interactive)	- Elimination of batch jobs - Updated record can be immediately queried	- May present problems if two or more users try to update file simultaneously - May present data base file recovery problems - High cost
	Batch	- Low cost - Easier to control updates if used with data base system	- Extra batch jobs

Data Base File Structure:

Separate claims and collections files, aggregate claims records, relationship established

- Ease of finding associated claims and collections records
- Fewer accesses necessary on claims file

- Additional records in claims file
- Additional fields in claims and collection records

EXHIBIT 5-19 (cont'd)

DESIGN OPTION ADVANTAGES AND DISADVANTAGES

Option	Advantage	Disadvantage
Data Base File Structure: (Cont'd)		
Separate claims and collections files, no aggregate claims records, relationships established	- Ease of finding associated claims and collections records - Fewer records in claims file	- More accesses required to claims file - Additional fields in claims and collections records
Separate claims and collections files, no aggregate claims record, no relationship established	- Fewer records in claims file - Smaller record length for collections and claims records	- More accesses required to claims file - Difficult to find associated claims and collections records
Combined claims and collection file	- Only one major data base in system	- Awkward key structure - Program coding difficulties

EXHIBIT 5-20
COMPARISON OF DATA PROCESSING
STRUCTURAL DESIGN OPTIONS

EVALUATION CRITERIA	OPTION COMBINATIONS											
	1	2	3	4	5	6	7	8	9	10	11	12
FLEXIBILITY TO ADAPT TO CHANGE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
COST OF IMPLEMENTATION	MOD.	MOD.	MOD.	MOD.	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
COST OF PROCESSING	MOD.	MOD.	MOD.	MOD.	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	HIGH
PROCESSING EFFICIENCY	MOD.	MOD.	MOD.	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	MOD.
TECHNICAL SOPHISTICATION	MOD.	MOD.	MOD.	LOW	LOW	LOW	LOW	LOW	HIGH	HIGH	HIGH	MOD.
COMPATIBILITY WITH OVERALL SYSTEM REDESIGN	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
COST EFFECTIVENESS EVALUATION	PRE-FERRED	ACCEPT-ABLE	ACCEPT-ABLE	UNDESIR-ABLE	ACCEPT-ABLE	ACCEPT-ABLE	ACCEPT-ABLE	ACCEPT-ABLE	ACCEPT-ABLE	ACCEPT-ABLE	ACCEPT-ABLE	UNDESIR-ABLE

lower cost options are less efficient in processing and less technically sophisticated. All of the options are adaptable to policy change and compatible with delivery system reassessment.

The recommended combination is option number 1. This combines on-line data entry, interactive editing, batch update, and separate claims and collections files with aggregate (summary) records and with a data base relationship established between the two files. This combination is considered the best match in terms of cost and output. The least desirable combination would be option 12. This option utilizes on-line data entry, editing, and updating, and a combined claims and collections file.

Additional Considerations

Three additional points should be discussed related to this design. The first point is that these options will improve the reporting capability of the reinsurance system. The second issue raises the question of what additional data elements are needed with the system redesign. The third issue asks what role the system should play in reducing duplicate payments.

Concerning the issue of improved reporting capability, with the redesign improvements noted, reports will now be able to detail all adjustments made to claims, both at the SSN and claim-number level. Second, amounts of claims after adjustments can easily be reported on. Third, reports which reconcile collections against claims can be generated. Fourth, balances due ED or guarantee agencies will no longer have to be calculated manually. Fifth, it will be possible to generate tickler notices for collections by accessing and updating a tickler file, which is shown on the system flowcharts. Sixth, such problems as the Check-to-Lender listing being generated in schedule number sequence, no reporting by individual guarantee agencies, and sequencing/page breaking problems on the accepted and rejected payment listings could be easily solved within the context of the redesigned system.

In addition to hard copy reporting, interactive queries on a CRT will make it easy for users to retrieve information. Due to the primitive nature of the existing system, even if on-line query were available, the limited and suspect information presently on file would reduce the value of such query capability.

Concerning the issue of additional data elements, interviews with appropriate ED staff members have not indicated that much more information is needed as input to the system. The only such requests noted were for a breakdown of principal and interest on the 1189-1 form and for the possible addition of date of default to the same form. Based on this user feedback, new data elements which could be added to the entire system might include:

- Claim interest
- Date of default
- Original claim amount
- Aggregate claim amount
- Net claim amount
- Adjustment code
- Collections type
- Collection control number
- Claim record number
- Tickler file fields.

Finally, duplicate payments have been a problem throughout the reinsurance process history. However, recent implementation of the automated claims processing system should eliminate the problem. The system uses an edit procedure which checks SSN and disbursement date combinations. Recurring combinations are considered duplicate payments. The redesigned system will, of course, guard against duplicate payments.

Deficiency Corrections Features of the Redefined System

The proposed redesign for the system will correct the deficiencies of the current system noted below in the following manner:

- No means for making adjustments to 1189-1 or 1189-3 line items.
 - The proposed redesign allows for positive or negative adjustments at either the SSN or claim number level.

- No means of correcting data after entry.
 - Nonfinancial data may be corrected interactively at any time after entry in the proposed redesign.
- Poor audit trails.
 - The proposed redesign maintains records of all adjustments at the detail level, records of all payments, and records of all collections.
- Inability to enter a second claim on the same student without artificially altering data.
 - The proposed keying structure will allow for entry of claims after the first one for the same borrower.
- Collections cannot be reconciled against claims.
 - The proposed system will integrate claims and collections so that the two can be reconciled.
- No means of tracking funds due ED from agencies for reasons other than collections from borrowers.
 - Collections file is structured to track such collections in the proposed system.
- Interfaces with other departments are manual.
 - The proposed system provides automated interfaces with OFMS and the Treasury Department.
- Inadequate reporting.
 - The substantial improvements in the proposed system will allow for greatly improved reporting including adjustment tracking, collections-claims reconciliation, and letter and notice generation.

5.6 CORRECTIVE ACTIONS IN OFMS

After interviewing several OFMS staff members, four specific recommendations are made for improving operational accountability. For the most part, these recommendations would enable OFMS to obtain information which they do not now have and which they desire for improved record keeping and reporting of reinsurance program funds. The four recommendations are:

- Establishment of procedures to calculate the outstanding collections balance

- Establishment of procedures to age reinsurance receivables
- Addition of claim interest to the 1189-1 form
- Performing a one-time correction of ED balances by using state guarantee agency data.

5.6.1 Establishment of Procedures to Calculate the Outstanding Collections Balance

OFMS wants to be able to know the outstanding collections balance at any time during the fiscal year. DPO is currently in the process of establishing a detailed record keeping process for the reinsurance program. If data compiled by the Claims Unit are combined with data available from the Guarantee Agency Quarterly Reports (Form 1130), outstanding collections could be estimated.

The Guarantee Agency Quarterly Report is submitted by each agency four times a year and includes much detailed financial information on agency activities. Line D-17, column d of this report (see Exhibit 5-21) summed across all agencies and multiplied by .7 (maximum collection fee allowance) would provide an estimate of the collections balance due ED as of the end of the last fiscal quarter (excluding monies due as refunds of overpayments). Still, it must be remembered that a sizable portion of this balance will never be obtained either because collections from the borrower prove ultimately impossible or because the guarantee agency does not consider it cost-effective to attempt collection.

DPO could estimate collections outstanding to date for the current quarter by summing up claims payments from all 1189-1 forms for the current quarter and multiplying by .7 (for maximum collection fee allowance). Then, the balance due ED (or guarantee agencies) from the Reinsurance Collections and Offsets Form (of the new record keeping procedures) could be added (or subtracted), and collections actually received against the claims for the quarter could be subtracted. The result of this calculation then could be added to the balances obtained from the 1130 forms for the current fiscal year. This estimate could be made either for each individual agency, or for all agencies combined. Expressed as a formula, this is:

EXHIBIT 5-21

GUARANTEE AGENCY QUARTERLY REPORT

U.S. DEPARTMENT OF EDUCATION OFFICE OF POSTSECONDARY EDUCATION OFFICE OF STUDENT FINANCIAL ASSISTANCE WASHINGTON, D.C. 20202		GUARANTEE AGENCY QUARTERLY REPORT Guaranteed Student Loan Program		Form Approved. OMB # 1840-0002 Expir. Date: 12/84	
NAME OF AGENCY		STATE		REPORT FOR QUARTER ENDING (MONTH) (DAY) (YEAR)	

PART D—STUDENT LOAN CLAIMS, COLLECTIONS AND RATIOS		CURRENT QUARTER		FEDERAL FISCAL YEAR (CUMULATIVE)		CUMULATIVE SINCE NOV. 8, 1985	
		NUMBER OF BORROWERS	AMOUNT	NUMBER OF BORROWERS	AMOUNT	NUMBER OF BORROWERS	AMOUNT
SECTION 1 — CLAIMS PAID							
D-1	CLAIMS PAID—DEFAULT						
D-2	CLAIMS PAID—BANKRUPTCY						
D-3	CLAIMS PAID—DEATH & DIS.						
D-4	TOTAL CLAIMS PAID (1+2+3)						
SECTION 2 — DOLLARS COLL.							
D-5	TOTAL AGENCY EFFORT						
D-6	TOTAL COLL AGENT EFFORT						
D-7	TOTAL COLLECTIONS (5+6)						

END OF QUARTER STATUS					
SECTION 3— ACCOUNTS CLOSED		NUMBER OF BORROWERS (a)	AMOUNT PAID AS CLAIM (b)	COLLECTED TO DATE (c)	TOTAL AMOUNT DUE (d)
D-8	DEATH, DISABILITY, & BANKRUPTCY				
D-9	WRITTEN OFF				
D-10	PAID IN FULL				
D-11	TOTAL ACCOUNTS CLOSED (8+9+10)				
SECTION 4—CURRENT BALANCE					
D-12	ACCOUNTS IN LITIGATION				
D-13	ACCOUNTS IN REPAYMENT				
D-14	REMAINING BALANCE (4-11-12-13)				
D-15	EXCLUSIONS				
D-16	UNRESOLVED ACCOUNTS (14-15)				
D-17	TOTAL (11+12+13+15+16)				
D-18	REPAYMENT ACCOUNTS— COLLECTION AGENT				
D-19	UNRESOLVED ACCOUNTS— COLLECTION AGENT				
SECTION 5 — RATIOS					
D-20	DEFAULT CLAIMS RATE	DEFAULT CLAIMS PAID (\$) (D-1) MATURED PAPER (\$) (8-18)		(SHOW CALCULATIONS) _____ %	
D-21	LOSS RATE	WRITTEN OFF (\$) (1 D-9b - D-9c) MATURED PAPER (\$) (8-18)		_____ %	
D-22	NET DEFAULT RATE	REMAINING BALANCE (\$) (D-14b - D-14c) MATURED PAPER (\$) (8-18)		_____ %	
D-23	RECOVERY RATE	TOTAL COLLECTIONS (\$) (D-7) DEFAULT CLAIMS PAID (\$) (D-1)		_____ %	

Balance = .7 (A + B) + C - D, where

A = Sum of lines D-17 of forms 1130 for the fiscal year totaled for all agencies

B = 1189-1 payments for all agencies

C = Balance due from Collections and Offsets form (add if balance due ED, subtract if due guarantee agencies) for all agencies

D = Collections from all agencies against claims included in (A).

The major drawback to this procedure is the tediousness of attempting to reconcile collections against claims at the SSN level manually for a given quarter. Perhaps an extension to the record keeping procedures now being designed would make the process easier. Such an extension would record a running collections balance during the fiscal quarter. It is assumed that these records could be kept by the Claims and Collections Units of DPO since they already record a large portion of the information required.

After the new record keeping procedures have been in place for a year it should be possible to use data from these records for the entire fiscal year instead of extracting it from the 1130 forms. However, since the 1130 already presents the data in summarized form, it would still be easier to use the information from this form.

5.6.2 Establishment of Procedures to Age Reinsurance Receivables

At the current time, OFMS is only able to estimate the aging of reinsurance receivables. Such estimates are reported on the Schedule 9 Form (SF 220), a sample of which was shown earlier in Exhibit 2-12. OFMS would prefer to report more accurate information.

Schedule 9 reports balances in Section II, 1, a and b, in 6 age categories: not delinquent, delinquent 1-30 days, delinquent 31-90 days, delinquent 91-180 days, delinquent 181-360 days, and delinquent over 360 days. At the present time, OFMS uses date of claims payment as the starting date for aging, and estimates the not-delinquent category based on previous year levels. A collection on a claim is considered to be delinquent from date of payment. It would be more accurate to use date of default as the starting date, but this information is not normally reported to ED by the guarantee agencies when they file claims.

In order to create a more accurate aging process, date of default must be obtained from the guarantee agencies. Since the aging schedule has categories of delinquency for 1-30 days and 31-90 days, it would be most valuable to obtain these data on a monthly basis. Therefore, merely adding another section to the quarterly report (Form 1130) would probably not be adequate. An alternative is a new monthly requirement asking agencies to age receivables using default date as the starting date; however, this may not be feasible politically due to the increase in reporting burden on the agencies. Another solution would be to add a "date of default" column to the 1189-1 form. Data from this form could then be compiled into aged balances which are more accurate than the current balances. This would reduce the burden placed on guarantee agencies, but increase the burden on OSFA staff.

The major drawback to this solution, aside from the labor involved, is the timeliness of the data. By the time the 1189-1 form is submitted and the data extracted for aging purposes, the date of default may be far enough in the past to reduce the value of data in the "1-30 days delinquent" category. However, this solution is more workable than requesting monthly reports from guarantee agencies and would provide more accurate data than OFMS currently has. Two additional points to be made are:

- To estimate claims receivables due ED, the figures extracted from the 1189-1 forms must be multiplied by .7 to allow for collections fees.
- In addition to regular collections from agencies due to defaults, there are also funds due ED as a result of overpayments and repurchases. These can also be aged and added to the balances derived from the 1189-1 forms.

5.6.3 Addition of Claims Interest to the 1189-1 Form

OFMS would like to have the funds on the 1189-1 form broken down into principal and interest. It is simple mechanically to add one more column to the form. A column called "interest amount of claim paid" could be added. It would become column 11. This change is necessary because the current form only distinguishes between total claim amount and principal claim amount. It cannot be assumed that interest is equal to the difference between these numbers since the total often includes other amounts such as collections fees and litigation fees.

The potential difficulty in this modification is requiring agencies to change their form completion methods. However, this extra information requirement should not place a serious burden on agencies if their record keeping has been done properly. Also, modifications to the data processing system would be required to capture, process, and report the principal and interest amounts separately. An additional problem is that any change to a form will require OMB clearance. This procedure is often quite time consuming.

5.6.4 Performing a One-time Correction of ED Balances by Using State Guarantee Agency Data

Due to inadequate internal controls and less than satisfactory coordination between OSFA and OFMS, account balances in OFMS for the GSL reinsurance program cannot be reconciled with subsidiary accounts in OSFA. A remedy for this would be for OFMS to accept as valid guarantee agency data as of the end of FY83. The items for the reinsurance program which need to be updated are:

- Provisions for losses on defaulted loans
- Provisions for losses on accrued interest
- Claims in process
- Allowance for losses on claims in process
- Claims and administrative expenses payable
- Interest payable
- Provisions for losses on claims in process.

These data would have to be obtained directly from the agencies. Since they would only have to report the data once, the effort required should be minimal.

At the same time, an effort could be made to correct various OFMS balances which are part of the GSL program, but not directly related to reinsurance. These include:

- Loans receivable
- Allowance for losses on loans receivable

- Insurance premiums receivable
- Accrued interest receivables
- Allowance for losses on accrued interest receivables
- Interest revenue.

This entire procedure would require a significant amount of effort and cooperation from the guarantee agencies. However, it may ultimately prove unavoidable, for there are those in ED who believe that the only way to correct GSL financial information is to start over again using guarantee agency data.

Evaluation of OFMS Corrective Actions

Exhibit 5-22 shows an evaluation of OFMS corrective actions. The anticipated costs of the recommended actions are low in the case of separating principal and interest, low to moderate for calculating outstanding balances, moderate for accurately aging receivables, and high in the case of the one-time correction of ED balances. In each case, the technical sophistication of the corrective actions is low, and each is adaptable to policy change and compatible with delivery system redesign. The cost-effectiveness of all four options is projected as acceptable.

EXHIBIT 5-22

EVALUATION OF OFMS CORRECTIVE ACTIONS

EVALUATION CRITERIA	CORRECTIVE ACTION			
	CALCULATE OUTSTANDING BALANCE	AGE INSURANCE RECEIVABLES	ADDITION OF CLAIM INTEREST TO 1189-1	ONE-TIME CORRECTION OF ED BALANCES
FLEXIBILITY TO ADAPT TO CHANGE	YES	YES	YES	YES
COST OF IMPLEMENTATION	LOW	MODERATE	LOW	HIGH
COST OF PROCESSING	MODERATE	MODERATE	LOW	HIGH
TECHNICAL SOPHISTICATION	LOW	LOW	LOW	LOW
COMPATIBILITY WITH DELIVERY SYSTEM REDESIGN	YES	YES	YES	YES
COST-EFFECTIVENESS EVALUATION	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

5-6

6.0 CONCLUSIONS

The major goals of this project have been to identify problem areas within the GSL reinsurance system and design appropriate corrective actions. The findings of the problem identification and needs assessment component are consistent with the conclusions of previous reports, audits, and hearings on reinsurance. That is, there are numerous severe problems in the claims and collections process. This report broke these problems into three general areas:

- Procedural and staffing problems in the Claims and Collections Units of DPO
- Automated data processing problems
- Procedural and accounting problems in OFMS.

The proposed series of corrective actions is responsive to these problems and consistent with a set of evaluation criteria. The project staff believes that implementing these corrective actions will have a major impact on increasing the efficiency and accountability of the reinsurance process.

In DPO, the most realistic and potentially far-reaching corrective actions are to implement new operating procedures, train staff in these procedures, develop a procedures manual, and design quality control procedures. These corrective actions will help to improve record keeping, provide audit trails, centralize the filing of supporting documentation, provide greater consistency in verifying collection check amounts against 1189-2 forms and claims amounts against 1189 forms, reduce duplicate payments, routinize rechecks of staff calculations resulting in fewer mispayments, and improve documentation for and communication with OFMS.

Although these corrective actions will have a significant impact, they should be considered short-term enhancements. In the long term, OSFA should consider

automating these procedures. It may be possible, for example, to use a mini- or microcomputer to assist in some of these operational procedures. Ultimately, the manual procedures should be integrated into a redesign of the current data processing system.

A number of corrective actions are proposed in the area of data processing. These corrective actions fall into two categories: marginal and structural. The marginal corrective actions are temporary measures that will have significant immediate impact on alleviating certain problems. Marginal corrective actions proposed include addition of new data elements, introduction of new update and query capabilities, and improvements in reporting. All of these corrective actions should be cost-effective. These actions, however, are not sufficient to remedy many of the major shortcomings of the reinsurance system. In the project team's opinion, this can only be accomplished through structural redesign.

Such a redesign is proposed as a structural corrective action. The new design includes two data entry options, two edit options, two update options, and four data base file structure options. These options can be put together in 12 different combinations. All of the options were analyzed on the basis of cost, efficiency, and the other evaluation criteria, as well as in terms of the special problems they may present. A combination of these options which will best meet user needs, and at the same time be economical, has been recommended. This combination includes on-line data entry and editing, batch updates, separate claims and collections data base files that are linked, and aggregate records.

In spite of the greater potential impact of structural corrective actions, the project team realizes that implementation of a redesign is at least several years away. This assessment is based upon the high cost of redesign and the current budget tightening environment in ED. Given this assumption and the severity of existing problems, the recommended marginal corrective actions will be a worthwhile investment until redesign is possible and should be an OSFA priority.

The third area of corrective actions relates to OFMS. The corrective action recommendations are the establishment of procedures to calculate outstanding collections balances, establishment of procedures to age reinsurance receivables,

addition of claim interest on the 1189-1 form, and performing a one-time correction of ED balances by using guarantee agency data. These recommendations will help improve accounting procedures in OFMS. Although OFMS is outside the jurisdiction of OSFA, OSFA will benefit from these changes in terms of improved data and data access.

It is important for OSFA to formulate an agenda for implementing marginal changes and planning for structural changes in the reinsurance system. This is particularly necessary given the rapid volume of growth in the program over the last six years and anticipated future growth. The reinsurance program has grown too large to continue to function with procedures designed when the program was significantly smaller.

This agenda should include discussion of several necessary issues. First, OSFA must reconsider its commitment to structural redesign. If such a commitment is to be made, a time frame for designing and implementing structural changes must be agreed upon. Second, OSFA must establish the technical objectives of the redesigned system, decide on cost ceilings, and assess the trade-off between technical efficiency and cost. Third, it should develop evaluation criteria similar to those used in this report to weigh redesign options. Fourth, OSFA should plan for a user needs assessment. Although some of the issues relevant to a needs assessment were conducted during this study, a follow-up will be necessary with special emphasis on reporting needs. Fifth, using the results of this report, OSFA should evaluate various design options and select a preferred option. Sixth, it must choose among system design alternatives, such as how to establish data base pointers, in order to implement the preferred option.

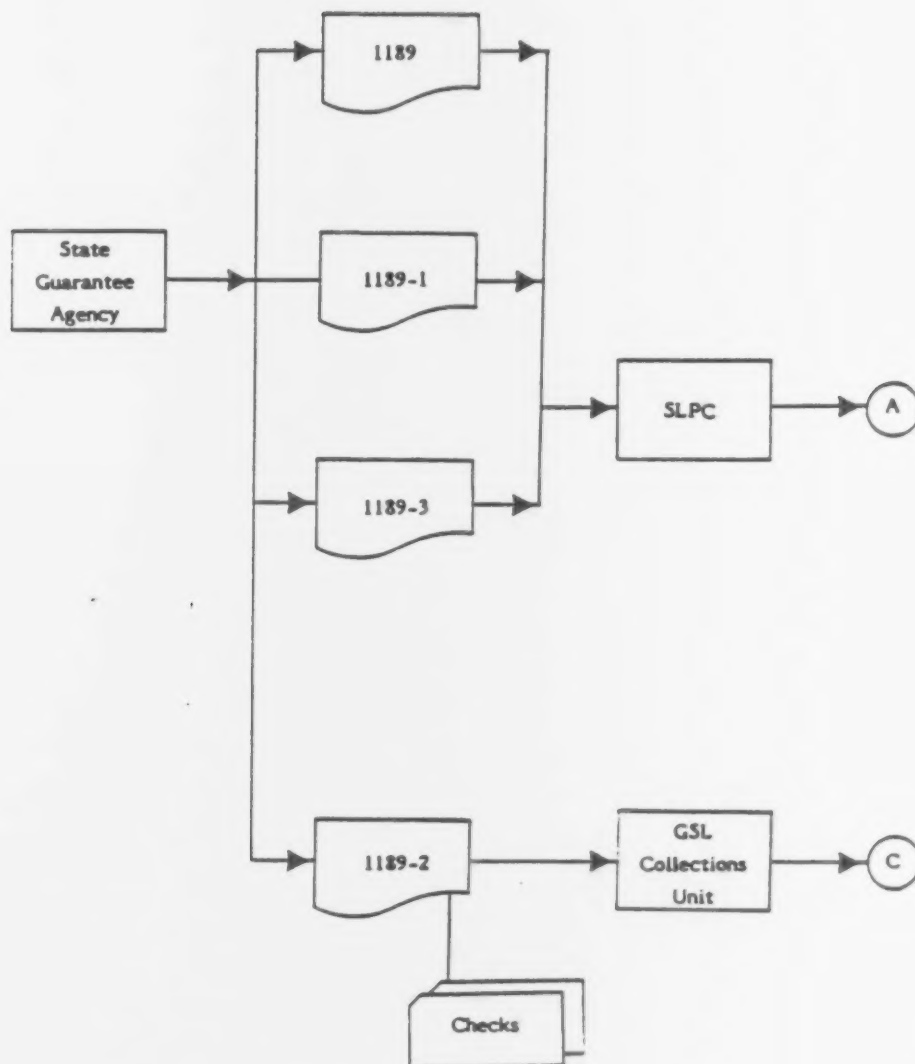
The project team believes that this program of short-term marginal enhancement and long-term structural corrective actions will successfully eliminate existing problems in the reinsurance system. In addition to increasing accountability and efficiency, it will also put OSFA at the forefront of the current delivery system redesign initiative.

APPENDIX A

**CURRENT GSL REINSURANCE
SYSTEM SPECIFICATIONS**

A-1

A.1 REINSURANCE DOCUMENTS

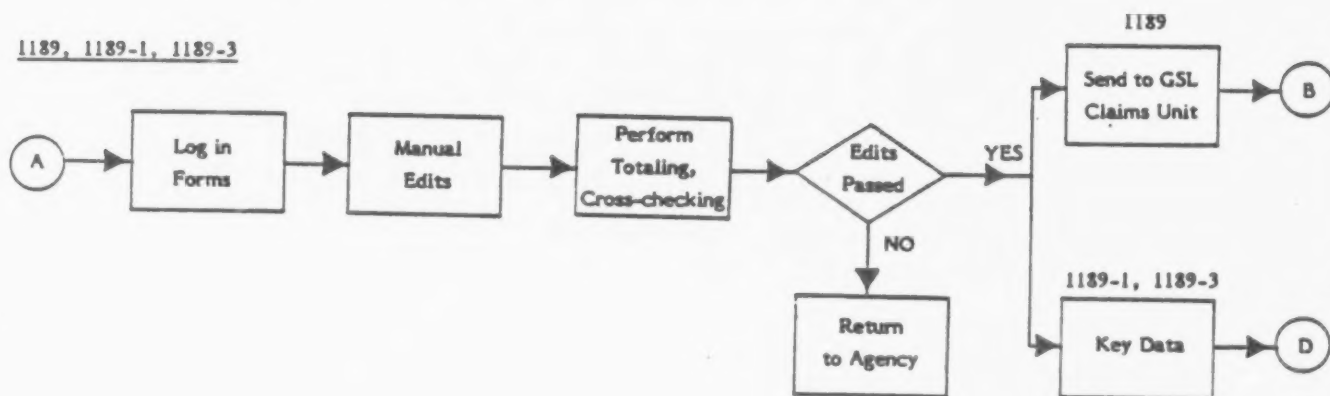


A.1 REINSURANCE DOCUMENTS

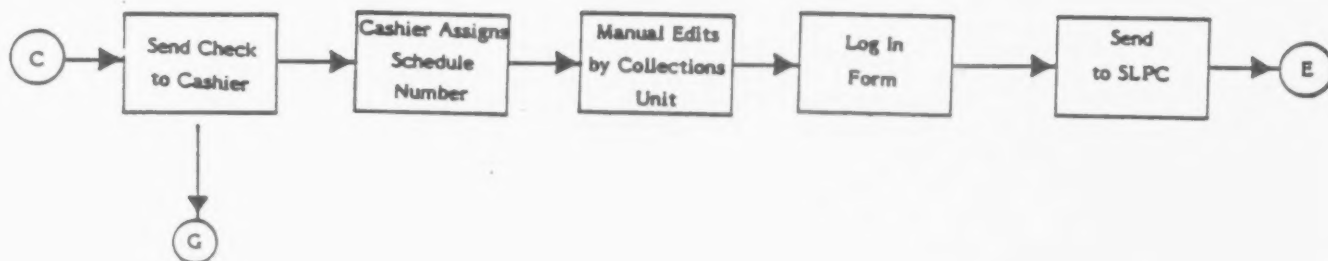
- State Guarantee Agency submits four forms involved with reinsurance:
 - 1189-1 **Guarantee Agency Request for Reimbursement Under Agreement for Federal Reinsurance.** (See Exhibit 2-1.) Used by state agencies to request reinsurance payments on loans which may be collectable (defaults and Chapter 13 bankruptcies). Line items are borrowers.
 - 1189-3 **Guarantee Agency Request for Reimbursement on Death and Disability.** (See Exhibit 2-2.) Used by state agencies to request reinsurance payments on loans which will not be collectable (death, disability, and Chapter 11 bankruptcies). Line items are borrowers.
 - 1189 **Guarantee Agency Request for Reimbursement for Claims Paid.** (See Exhibit 2-3.) State agencies submit these along with 1189-1 and 1189-3 forms as summary level documents. Line items are summaries of 1189-1 and 1189-3 documents.
 - 1189-2 **Guarantee Agency Report of Recoveries of Claims Paid Under Federal Reinsurance.** (See Exhibit 2-4.) This form is submitted by state agencies to report on collections from borrowers in default. Accompanied by checks for payments.
- 1189-1, 1189-3, and 1189 forms are sent to the Student Loan Processing Center (SLPC) in Norfolk, Virginia.
- 1189-2 form and accompanying checks are sent to GSL Collections Unit in OSFA's Division of Program Operations (DPO).

A.2· MANUAL PROCESSING

1189, 1189-1, 1189-3



1189-2



A.2 MANUAL PROCESSING

- Upon receipt at SLPC, forms are grouped so that all 1189-1 and 1189-3 forms are attached to corresponding 1189 forms.

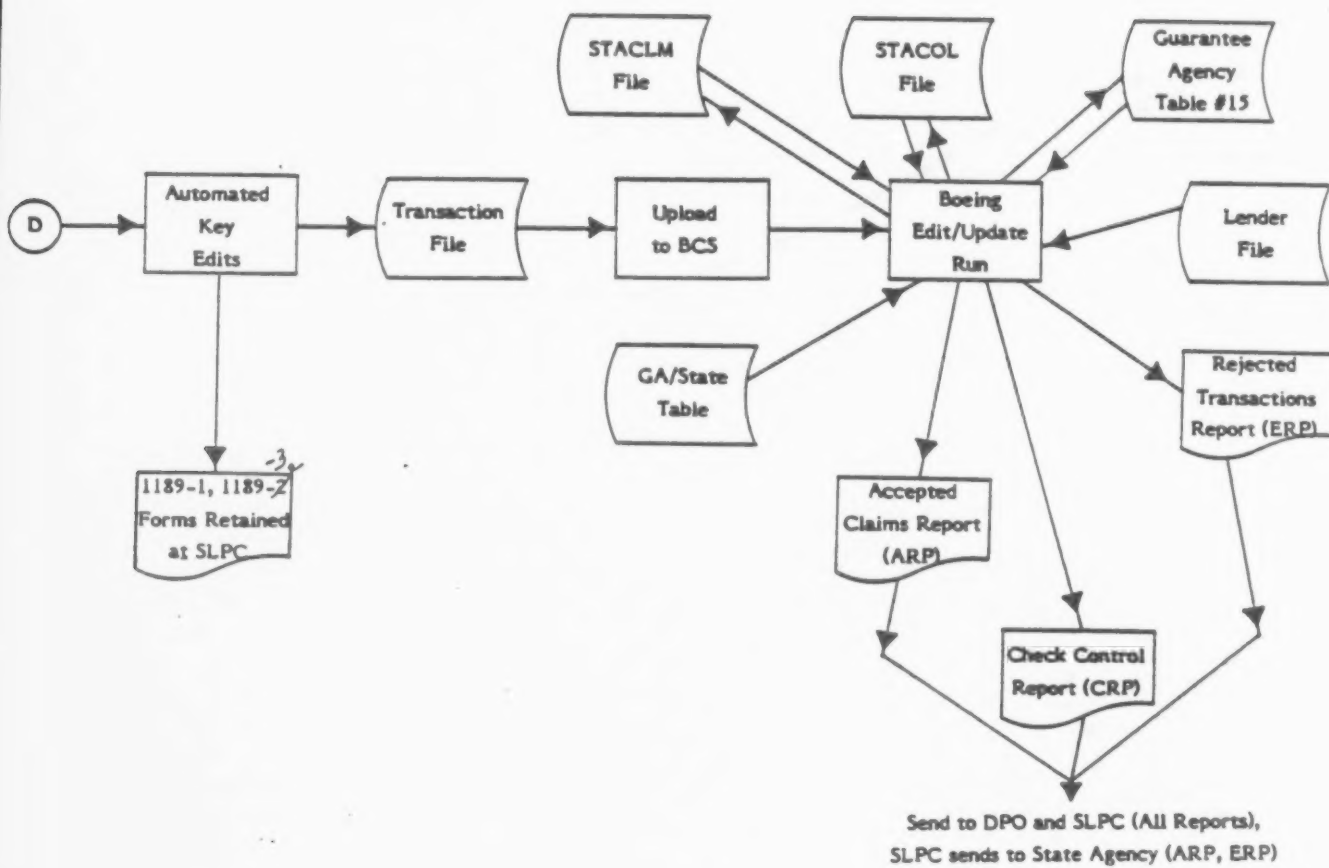
1189, 1189-1, 1189-3 Forms

- All 1189, 1189-1, and 1189-3 forms are time stamped when received.
- If an 1189 is missing, the entire set of forms is returned to Guarantee Agency with buck slip.
- All forms are entered into SLPC control log.
- Manual edits are performed. (See Exhibit 2-5.)
- Totals on 1189 are checked to ensure that they agree with 1189-1 and 1189-3 forms.
- If edit errors cannot be solved on the phone, forms are returned to Guarantee Agency.
- Following edits, five claims are batched to form a schedule, assigned a schedule number (a running log is kept), and sent to data entry.
- 1189 forms are then sent to the GSL Claims Unit in OSFA.

1189-2 Forms

- Checks accompanying 1189-2 forms are sent to the cashier.
- 1189-2 forms are assigned a schedule number by the cashier.
- 1189-2 forms are manually edited by Collections Unit staff. Fields checked include:
 - Borrower name
 - Borrower Social Security Number
 - Collection received amount
 - Percent of collection to ED.
- 1189-2 forms are logged; administrative fee retained, and collections submitted are recorded.
- 1189-2 forms are then sent immediately to SLPC.
- Collections are received once or twice a month from each agency.
- Amount retained is deducted from total (not on a line-by-line basis).
- Agency normally retains 30 percent of total as a collection fee.
- The 1189-2 form is also used to report repurchases.

A.3 AUTOMATED PROCESSING



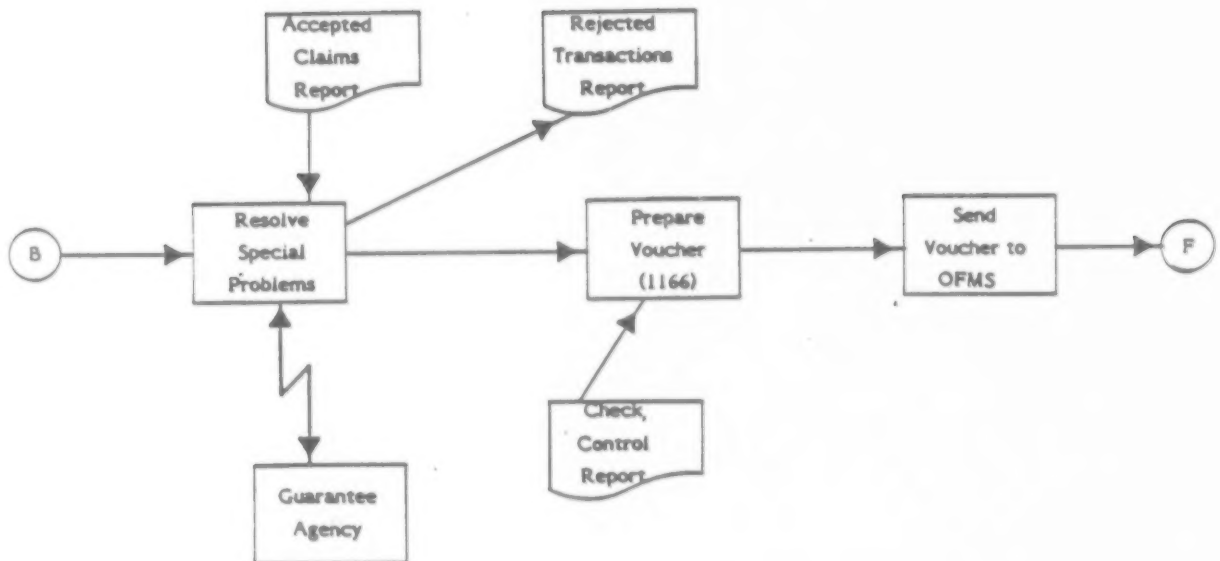
A.3 AUTOMATED PROCESSING

- As data are entered, on-line data entry edits are performed. (See Exhibit 2-6.)
- A file of detail (borrower) level 1189-1 and 1189-3 transactions is generated and uploaded to Boeing Computer Services (BCS) as shown in Exhibit 2-6.
- SLPC retains and places in storage the 1189-1 and 1189-3 forms from which the claim data were keyed.
- The computer job which edits the claim data and updates the reinsurance data base is run twice a week at BCS. During these runs:
 - The State Claim (STACLM) data base provides an index of claim numbers.
 - Edits are performed to check claim number, lender number, and Guarantee Agency/State.
 - Social Security Number-disbursement date combinations are checked against the reinsurance data base (STACOL) to prevent payment of duplicate claims.
 - Table #15 is used to drive the reinsurance trigger mechanism. For Table #15:
 - At start of the fiscal year, the table is loaded with total loans in repayment.
 - Year-to-date total claims are accumulated so that, after a state agency is five years old,
 - IF default rate equals or exceeds 9 percent
reimbursement rate is 80 percent.
 - IF default rate is equal to or greater than 5 percent but is less than 9 percent
reimbursement rate is 90 percent.
 - IF default rate is less than 5 percent
reimbursement rate is 100 percent.
 - Reinsurance triggers are not applicable to new state agencies. During the first five years in the program, the reimbursement rate is 100 percent.
 - Valid claims are added to the reinsurance data base (STACOL).
 - Once data have been added to STACOL, there is no means of updating or deleting them.

(This page has intentionally been left blank.)

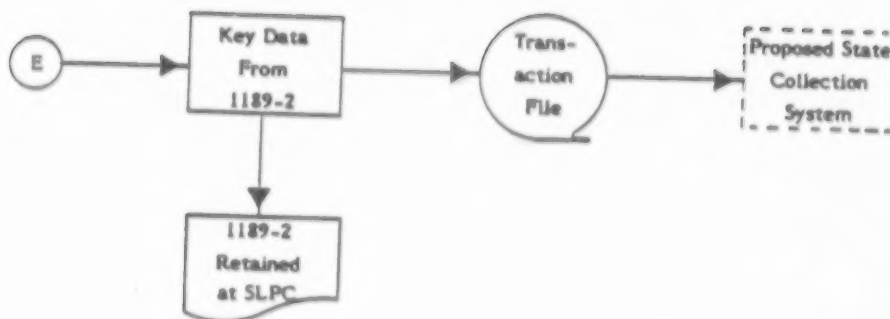
- Three reports are produced by the automated system:
 - Accepted Claims Report (ARP)
 - Rejected Transactions Report (ERP)
 - Check Control Report (CRP).
- ARP, ERP, and CRP are sent to Claims Unit and SLPC.
- ERP and ARP are sent by SLPC to the state agency.
- See Exhibit 2-7 for file descriptions, Exhibit 2-8 for error messages, and Exhibit 2-9 for report samples.

A.4 MANUAL PROCESSING CONTINUED



A.4 MANUAL PROCESSING CONTINUED

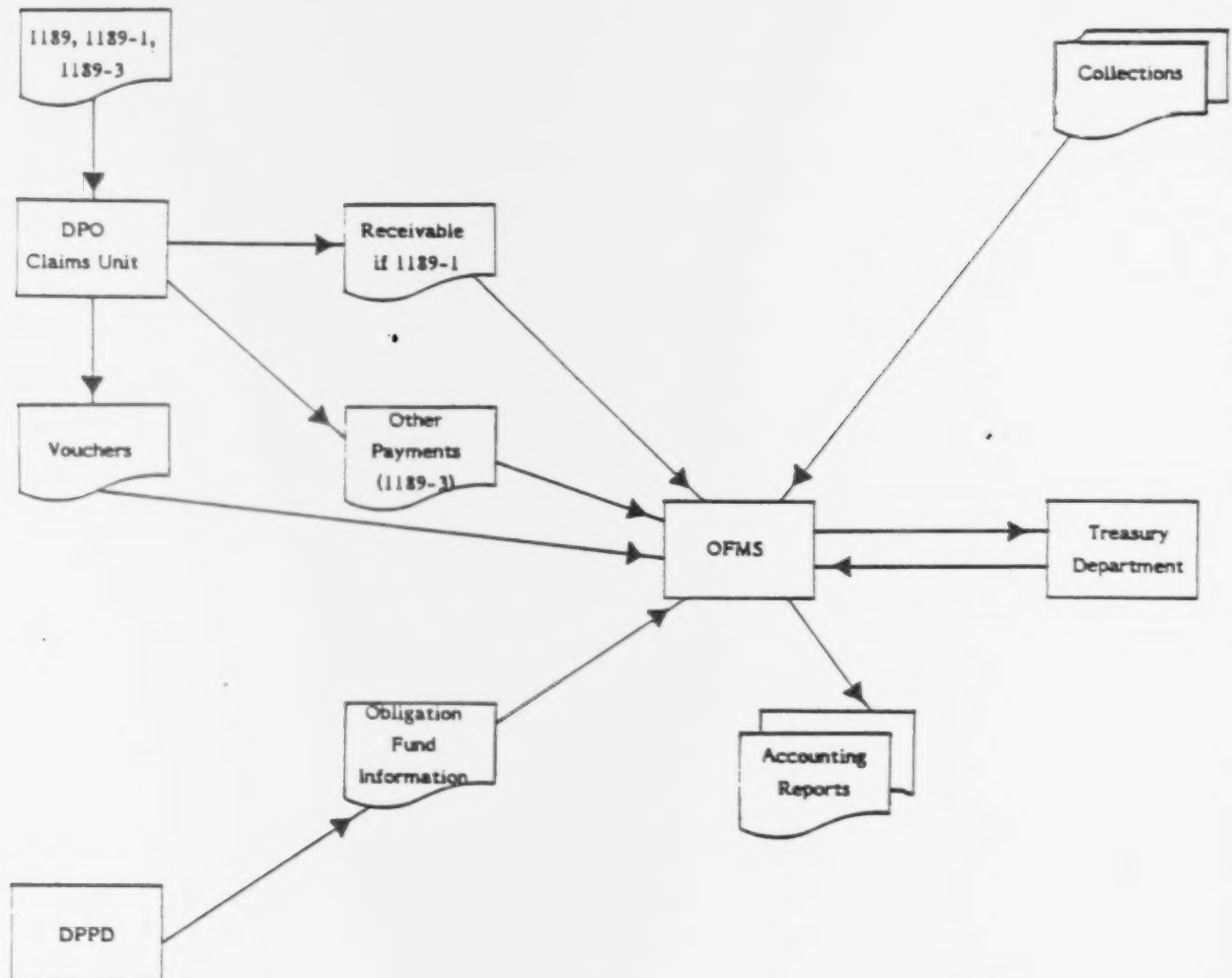
- At the Claims Unit in DPO, special problems are resolved on an ad hoc basis. These include:
 - Rebalancing of 1189 totals since the totals do not reflect rejected transactions.
 - Resolving adjustments to balances.
 - Answering questions posed by state agencies.
- Using the Check Control Report, a voucher (1166 form) is prepared, one for each schedule number. (See Exhibit 2-10.)
- The voucher is forwarded to OFMS.



A.5 1189-2 AUTOMATED PROCESSING

- Data from 1189-2 are keyed.
- 1189-2 forms are retained at SLPC.
- A transactions file, on tape, is generated. (See Exhibit 2-11 for file layout.)
- Repurchases of loans are not indicated on file.
- A state collections system is proposed to process the collections documents.

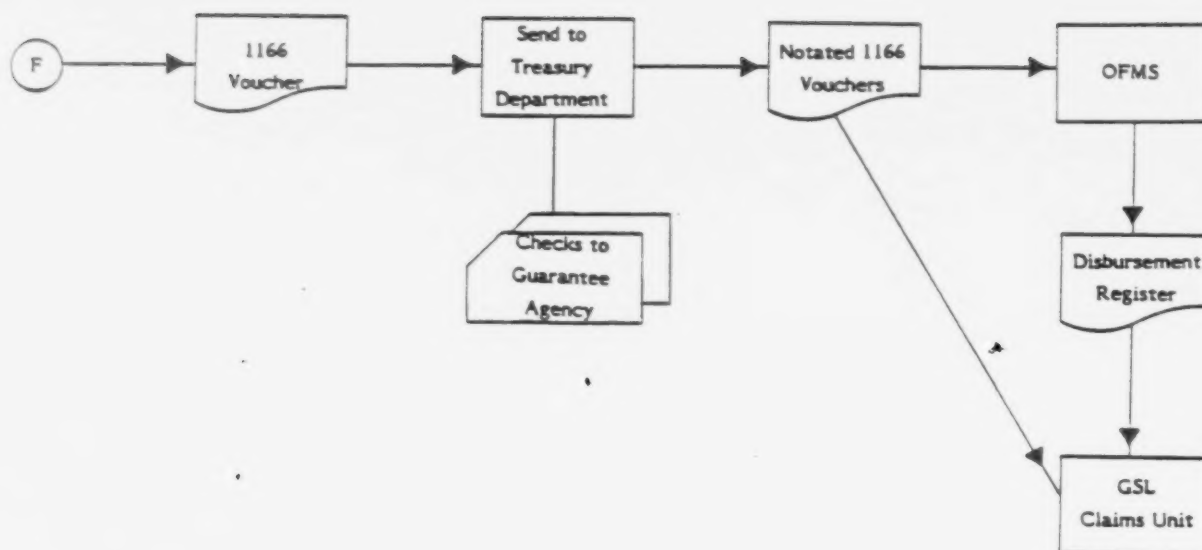
A.6 OFMS OVERVIEW



A.6 OFMS OVERVIEW

- The payment of 1189-1 claims request (defaults and Chapter 13 bankruptcies) generates receivables which are reported to OFMS.
- Other payments on 1189-3 form (death, disability, and Chapter 11 bankruptcies) are also reported to OFMS.
- Collections data are received by OFMS.
- OFMS also receives obligation fund and other information from the Division of Policy and Program Development (DPPD).
- The OFMS accounts system then reconciles collections, payment and funding data, and generates various accounting reports. (See Exhibit 2-12 for sample.) There is also interaction with the Treasury Department concerning the generation of claims payment checks.

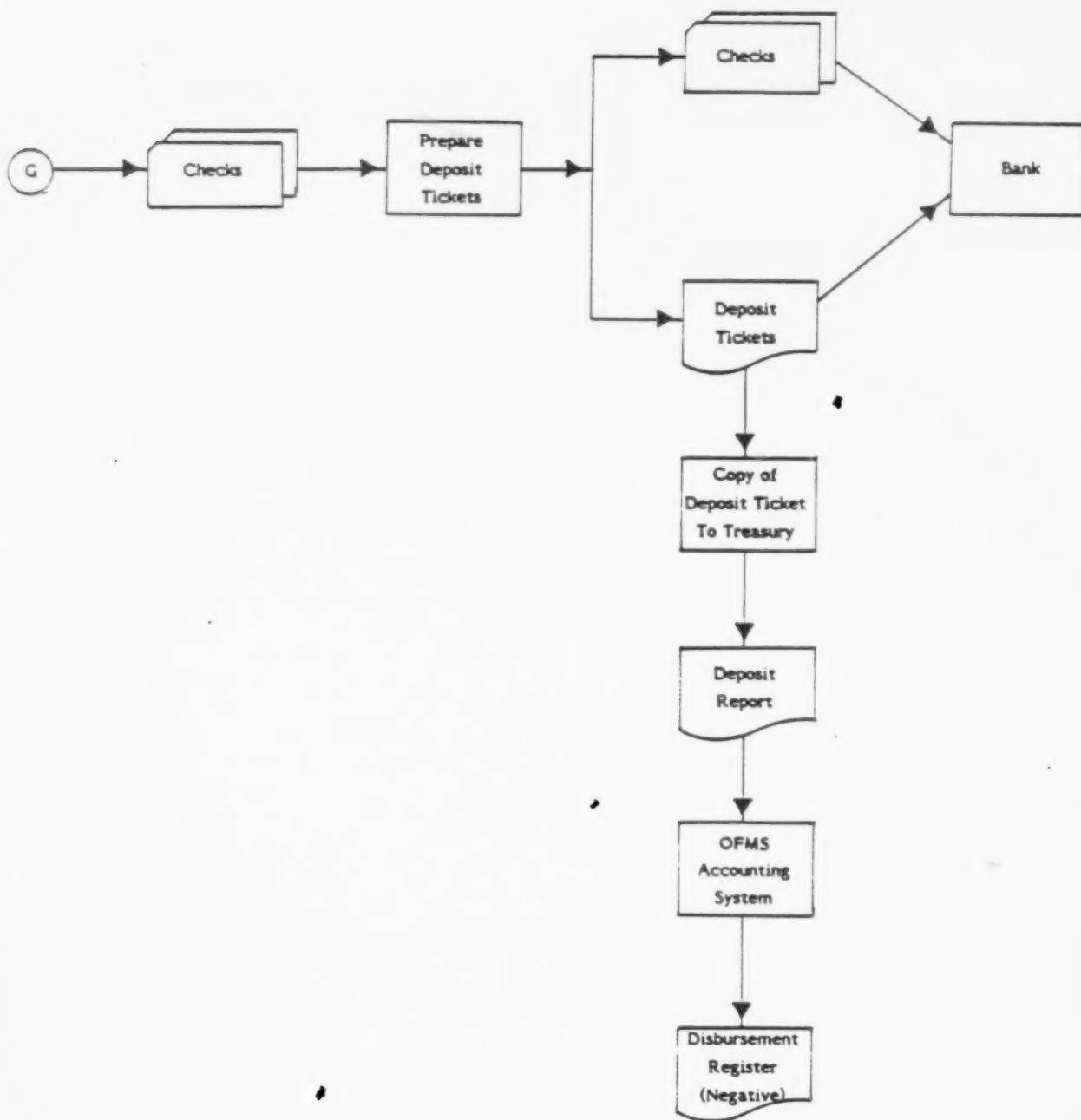
A.7 DISBURSEMENT PROCESS



A.7 DISBURSEMENT PROCESS

- OFMS sends the 1166 vouchers to the Treasury Department.
- Treasury prepares the check for claims and sends them to the Guarantee Agencies.
- Treasury also sends the 1166 vouchers back to OFMS after they are paid and copies of the vouchers along with Treasury check numbers to the GSL Claims Unit in DPO.
- OFMS then prepares a disbursement register. (See Exhibit 2-13.)

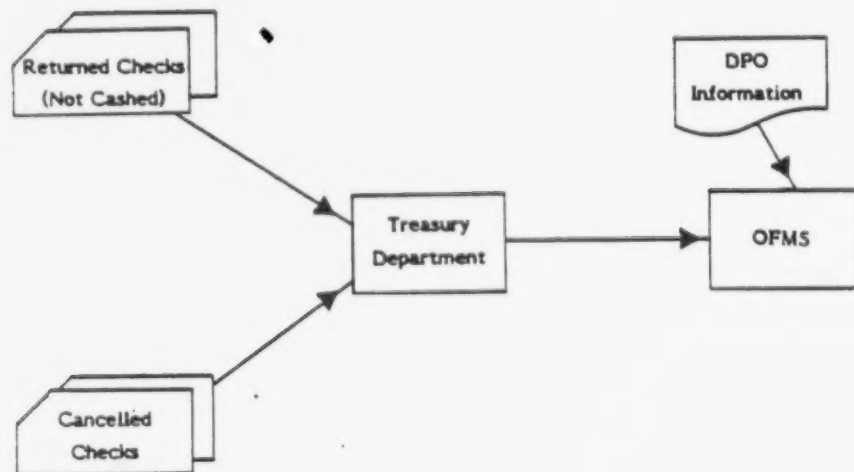
A.8 COLLECTIONS PROCESS



A.8 COLLECTIONS PROCESS

- The program officer prepares deposit tickets for the collections checks received and sends both to the commercial bank which ED uses.
- A copy of the deposit ticket is forwarded to the Treasury Department.
- Monthly, the Treasury Department sends back a deposit report to OFMS.
- OFMS then must reconcile appropriation numbers by CAN, and DPO must reconcile collections by Social Security Number and State.
- Collections are reported on the disbursement register as negative disbursements.

A.9 RETURNED AND CANCELLED CHECKS



A.9 RETURNED AND CANCELLED CHECKS

- Cancelled and returned (not cashed) claims payment checks go to the Treasury Department.
- Cancelled checks are put into a suspense account temporarily until OFMS can reconcile them with appropriation numbers.
- Using account numbers and other data from the Claims Unit in DPO, OFMS reconciles returned checks.

APPENDIX B

QUALITY CONTROL PROCEDURES FOR
DPO AND SUPPORTING MATERIALS

DPO QUALITY CONTROL CHECKLIST FOR REINSURANCE: TABULATION SHEET

MCL: / = % Error
Total no Total items

Today's Date

GAL: / = % Error NA
Total no Total items

Reviewer's Name

ADJ/COL: / = % Error NA
Total no Total items

Sample Period / / to / /
Month Day Year Month Day Year

Initials of Clerk Who Initially Reviewed
Document (From MCL Column 9)

OVERALL: / = % Error
Total no Total items

Type of Document Being Reviewed (circle one):
1189, 1189-2, Adjustment, Correspondence or other

All 1189 computations correct?
Yes No NA

Amount of error on 1189
(from line 2.4)
+

Circle Amount NA
one

All 1189-2 computations correct?
Yes No NA

Timeliness (is processing within standard?/
Number days to process)

4.1
Yes No Days NA

4.2
Yes No Days NA

4.3
Yes No Days NA

4.4
Yes No Days NA

4.5
Yes No Days NA

4.6
Yes No Days NA

DPO QUALITY CONTROL CHECKLIST FOR REINSURANCE

Instructions: For each question, answer either "Yes" or "No" by circling in red the correct response. If a question is not relevant to the type of document being reviewed, circle "NA."

	MASTER CONTROL LOG (MCL)	GUARANTEE AGENCY LEDGER (GAL)	ADJUSTMENTS/ FILE MAINTENANCE DOCUMENT (ADJ)	COLLECTIONS/ OFFSETS RECORD (COL)
1. Operating Procedures				
1.1 Is date of receipt stamped in top right hand corner of <u>incoming document</u> ?	Yes No NA			
1.2 Is control number written in top right hand corner of <u>incoming document</u> ?	Yes No NA			
1.3 Does date on <u>MCL Column 1</u> match date stamped in right hand corner on <u>1189/document</u> ?	Yes No NA			
1.4 Does number on <u>MCL Column 2</u> match number in right hand corner on <u>1189/document</u> ?	Yes No NA			
1.5 Does number on <u>GAL Column 2</u> match number in right hand corner on <u>1189/document</u> ?		Yes No NA		
1.6 Does number on <u>ADJ line 1</u> match number in right hand corner on <u>1189/document</u> ? (If no adjustments are indicated on document, circle NA.)			Yes No NA	
1.7 Using Table 1, is agency code on <u>MCL Column 4</u> correct for the agency name on <u>MCL Column 3</u> ?	Yes No NA			

B-3

MASTER
CONTROL
LOG

(MCL)

GUARANTEE
AGENCY
LEDGER

(GAL)

ADJUSTMENTS/
FILE
MAINTENANCE
DOCUMENT
(ADJ)

COLLECTIONS/
OFFSETS
RECORD

(COL)

1. Operating Procedures (Cont'd)

1.8 Does date on MCL Column 5 match SLPC receipt date on 1189? (If document is not an 1189, circle NA.)

Yes No NA

1.9 Using Table 2, is code for type of document correct on MCL Column 6?

Yes No NA

1.10 Using Table 2, is code for type of document correct on GAL Column 3?

Yes No NA

1.11 Does date on MCL Column 7 match date stamped on reports with same claim number as 1189? (If document is not an 1189, circle NA.)

Yes No NA

1.12 Does number on MCL Column 8 match claim number on 1189? (If document is not an 1189, circle NA.)

Yes No NA

1.13 Does number on GAL Column 4 match claim number on 1189? (If document is not an 1189, circle NA.)

Yes No NA

1.14 Examine 1189 to see if claim includes an adjustment. If so, is either the original claim number(s) shown on the 1189 or is MCL Column 14 marked "no original claim number"? (If document is not an 1189 or no adjustment is indicated, circle NA.)

Yes No NA

MASTER
CONTROL
LOG

(MCL)

GUARANTEE
AGENCY
LEDGER

(GAL)

ADJUSTMENTS/
FILE
MAINTENANCE
DOCUMENT
(ADJ)

COLLECTIONS/
OFFSETS
RECORD

(COL)

1. Operating Procedures (Cont'd)

1.15 Examine 1189 to see if claim includes an adjustment. If so, is, either the original claim number(s) shown on the 1189 or is GAL Column 12 marked "no original claim number shown - agency contacted will reply by _____"? (If document is not an 1189 or no adjustment is indicated, circle NA.)

Yes No NA

1.16 Does date on MCL Column 1 match date on ADJ Space 2?

Yes No NA

1.17 Are initials of clerk shown on MCL Column 9?

Yes No NA

1.18 Is date on MCL Column 10 the same or later than the date on MCL Column 9?

Yes No NA

1.19 Is date on MCL Column 11 the same or later than the date on MCL Column 10?

Yes No NA

1.20 Is date on MCL Column 12 the same or later than the date on MCL Column 11?

Yes No NA

1.21 Is date on MCL Column 13 the same or later than the date on MCL Column 12?

Yes No NA

1.22 If document is an 1189-2, is a date indicated on MCL Column 14? (If document is not an 1189-2, circle NA.)

Yes No NA

MASTER
CONTROL
LOG

(MCL)

GUARANTEE
AGENCY
LEDGER

(GAL)

ADJUSTMENTS/
FILE
MAINTENANCE
DOCUMENT
(ADJ)

COLLECTIONS/
OFFSETS
RECORD

(COL)

1. Operating Procedures (Cont'd)

1.23 If MCL Column 14 reads "collection action implemented," is ADJ Line 7 checked and dated?

Yes No NA

1.24 If MCL Column 14 reads "collection action implemented," does control number on MCL Column 2 match control number on COL Line 1?

Yes No NA

1.25 Is date on MCL Column 15 the same or later than the date on MCL Column 13?

Yes No NA

1.26 Is date on GAL Column 13 the same or later than the date on MCL Column 13?

Yes No NA

1.27 Does GAL indicate agency name and fiscal year on top?

Yes No NA

1.28 Does number on GAL Column 5 match schedule number on 1189? (If document is not an 1189, circle NA.)

Yes No NA

1.29 Does number on GAL Column 6 match amount on payment voucher for that claim?

Yes No NA

1.30 Does number on GAL Column 7 match treasury check number or electronic funds transfer date on payment voucher for that claim?

Yes No NA

MASTER
CONTROL
LOG
(MCL)

GUARANTEE
AGENCY
LEDGER
(GAL)

ADJUSTMENTS/
FILE
MAINTENANCE
DOCUMENT
(ADJ)

COLLECTIONS/
OFFSETS
RECORD
(COL)

1. Operating Procedures (Cont'd)

1.31 Does number on GAL Column 8 match collection amount on photocopy of check? (If document is not on 1189-2, circle NA.)

Yes No NA

1.32 Does number and date on GAL Column 10 match check number and date drawn on photocopy of check? (If document is not on 1189-2, circle NA.)

Yes No NA

1.33 Does number on GAL Column 11 match receipt number on cashier's record? (If document is not an 1189-2, circle NA.)

Yes No NA

1.34 Does ADJ indicate agency name and fiscal year on top? (If there are no adjustments, circle NA.)

Yes No NA

1.35 If adjustments are shown for multiple line items on an 1189, is ADJ Line 3 checked? (If there are no multiple adjustments, circle NA.)

Yes No NA

1.36 Does SSN on ADJ Line 4a match SSN on document indicating adjustment? (If SSN is not shown on documents, circle NA.)

Yes No NA

1.37 Does name on ADJ Line 4b match borrower's name on document indicating adjustment? (If borrower's name is not shown on document, circle NA.)

Yes No NA

MASTER
CONTROL
LOG

(MCL)

GUARANTEE
AGENCY
LEDGER

(GAL)

ADJUSTMENTS/
FILE
MAINTENANCE
DOCUMENT
(ADJ)

COLLECTIONS/
OFFSETS
RECORD
(COL)

1. Operating Procedures (Cont'd)

1.38 Does number on ADJ Line 4c match original claim number on document indicating adjustment? (If original claim number is not shown on document, circle NA.)

Yes No NA

1.39 Examine document indicating adjustment and use Table 3 to see if type of adjustment on ADJ Line 4d is correct. Is adjustment correct?

Yes No NA

1.40 Does COL indicate agency name and fiscal year on top?

Yes No NA

1.41 If document control number is indicated on COL, is some collection action indicated on COL Line 1?

Yes No NA

B-8

2. 1189 Form (If document is not an 1189,
circle NA in each response space.)

1189

1189 Error

1189-2

2.1 Compare total O.E. paid on the Accepted Claims Report
+ control amount on the Rejected Transactions Report
to Line 5. If these numbers are identical, circle YES.
If these numbers are not identical and no reconciliation
is attached justifying the difference, circle NO.
If these numbers are not identical but
a reconciliation is attached, circle YES.

Yes No NA

2.2 Does total O.E. paid on the Accepted Claims Report
= total paid for the individual claim on voucher?

Yes No NA

2.3 Does the disbursement total on the Summary for
All Lenders Report = total paid for all claims in the
schedule on voucher(s)?

Yes No NA

B-9

2.4 If the response to 2.3 is no, compute the difference
between the two numbers and enter that number in the
appropriate space. If disbursement total on the
Summary for All Lenders Report is the higher number,
circle the - before the entered number. If the total
on the voucher is the higher number, circle the +
before the entered number. If the response
to 2.3 is yes, circle NA.

+ \$ _____ NA

2.5 Does the disbursement total for each CAN number on
the Summary for All Lenders Report = total paid on
each CAN number for all claims in the schedule on voucher(s)?

Yes No NA

3. 1189-2 Form (If document is not an 1189-2, circle NA
in each response space.)

3.1 Does the sum of the line items = Line 20?

Yes No NA

3.2 Multiply Line 20 by .7. Is amount of collections check
this amount or more?

Yes No NA

4. Timeliness of 1189 Processing (If document is not an 1189, write NA in each response space unless the document indicates need for a collection. If collection is required, answer question 4.6 and circle NA in all other questions.)

TOTAL WORKING DAYS

TIMELINESS

4.1 Enter total number of working days difference between MCL Column 5 and MCL Column 1. Is the difference equal to or less than 6 working days?

Yes No NA

4.2 Enter the total number of working days difference between MCL Column 1 and MCL Column 7. Is the difference equal to or less than 2 working days?

Yes No NA

4.3 Enter total number of working days difference between MCL Column 1 and MCL Column 12. Is the difference equal to or less than 3 working days?

Yes No NA

4.4 Enter total number of working days difference between MCL Column 12 and MCL Column 13. Is the difference equal to or less than 2 working days?

Yes No NA

4.5 Enter total number of working days difference between MCL Column 5 and MCL Column 15. Is the difference equal to or less than 13 working days?

Yes No NA

4.6 In cases requiring collections, enter total number of working days difference between MCL Column 1 and COL Line 1. Is the difference equal to or less than 3 working days? (If collections are not required, write NA.)

Yes No NA

B-10

AGENCY CODE	STATE CODE
611	DC HEAF
620	KS
627	MN
631	NE
654	WV
656	WY
701	AL
702	AK
705	AR
706	CA
708	CO
709	CT
710	DE
711	DC (OLD)
712	FL
713	GA
716	ID
717	IL
718	IN
719	IA
721	KY
722	LA
723	ME
724	MD
725	MA
726	MI
728	MS

TABLE I

LIST OF AGENCY CODES FOR EACH
GUARANTEE AGENCY

AGENCY CODE	STATE CODE
729	MO
730	MT
732	NV
733	NH
734	NJ
735	NM
736	NY
737	NC
738	ND
739	OH
740	OK
741	OR
742	PA
744	RI
745	SC
746	SD
747	TN
748	TX
749	UT
750	VT
751	VA
753	WA
755	WI
772	PR
778	VI
804	AZ
815	HI
836	USAF
860	AS
866	GU
869	NI
875	TT
948	TX-CORD. BD.

TABLE 1 (CONTINUED)
LIST OF AGENCY CODES FOR EACH
GUARANTEE AGENCY

CL - Claims and Collections

- CL-1 New reinsurance claim
- CL-2 Collections for loans on which a reinsurance claim has been paid (1189-2 form lists collections received by agency from borrowers).
Note: 1189-2 marked Repurchase is an adjustment.
- RP Repurchase (1189-2 marked "Repurchase")

AD - Adjustments to Reinsurance Claims

- AD-1 Other - This type may include adjustments that do not affect the state claims system data base. For example: transfer of funds.
- AD-2 Duplicate (may be a returned Treasury check)
- AD-3 Overpayment notice (no check enclosed)
- AD-4 Overpayment refund
- AD-5 Supplemental claim (Underpaid)
- AD-6 Supplemental claim - Previously paid at less than 100% default claim and subsequently became death, disability, or bankruptcy. Additional payment due Agency.
- AD-7 Additional original reinsurance claim payment owed agency when another ARP/ERP cycle is run by contractor after original reinsurance claim payment.
- AD-8 Overpayment due to reinsurance claim paid at more than ED liability.
- AD-9 Underpayment due to reinsurance claim paid at less than ED liability.
- AD-10 Agency check returned unpaid

MA - Correspondence and Telephone Inquiries

- MA-1 Related to claim
- MA-2 Related to adjustment
- MA-3 Related to collections
- MA-4 Other

NOTE: TC will be added to a type code if a Treasury check was returned

TABLE 2

CODES FOR TYPES OF DOCUMENTS
(For use with Questions 1.9 and 1.10 ONLY)

-
- | | |
|-------|---|
| AD-1 | Other - This type may include adjustments that do not affect the monetary fields on the state claims subsystem data base. For example: transfer of funds. |
| AD-2 | Duplicate (may be agency's check or returned Treasury check) |
| AD-3 | Overpayment Notice (no check from agency) - not related to Trigger Figure) |
| AD-4 | Overpayment Refund - not related to Trigger Figure |
| AD-5 | Supplemental Claim (Underpaid) |
| AD-6 | Supplemental Claim-Death, Disability, Bankruptcy previously paid at less than 100 percent as Default |
| AD-7 | Additional ARP/ERP Cycle after Original Payment |
| AD-8 | Overpayment due to Reinsurance Claims paid at more than ED Liability (Trigger Figure Calculation) |
| AD-9 | Underpayment due to Reinsurance Claims paid at less than ED Liability (Trigger Figure Calculation) |
| AD-10 | Check from Agency Returned unpaid from Bank |
-

TABLE 3
CODES FOR TYPES OF ADJUSTMENTS
(For use with Question 1.39 ONLY)

DPO QUALITY CONTROL CHECKLIST FOR REINSURANCE: USER INSTRUCTIONS

I. Preliminary Instructions

- Select a document for review according to the sampling plan and obtain all supporting materials necessary to audit that document
- Fill in the following items in the right hand corner of the Tabulation Sheet:
 - Today's date
 - Your name
 - Dates covered by this audit
 - Initials of clerk who initially reviewed document
 - Type of document being reviewed

II. Auditing Instructions

- For Section 1, Operating Procedures, circle the correct answer to each question. If any question is not relevant, circle NA.
- For Section 2, 1189 Form, circle the correct answer to each question except for question 2.4. For question 2.4, enter the requested figure and be sure to circle either + or - as instructed. If any question is not relevant, circle NA.
- For Section 3, 1189-2 Form, circle the correct answer to each question. If any question is not relevant, circle NA.
- For Section 4, Timeliness of 1189 Processing, enter the total number of working days for processing as instructed and then circle the correct answer to each question. Use a calendar to be sure that only working days are counted. If any question is not relevant, circle NA.

III. Tabulation Instructions

- Add up the number of No responses in the MCL column and indicate this number in the left hand corner of the checklist. Add up the number of Yes plus the number of No responses and indicate this number in the left hand corner of the checklist in the space for total items. (Do NOT include the number of NA responses under total items). Compute percent error as $(\text{total no} + \text{total items}) \times 100$.
- Repeat the above procedure for the GAL column.

- Repeat the above procedure summing the subtotals for the ADJ log and COL log and calculate a combined percent error.
- Compute the sum of the total no for the MCL, GAL, and ADJ/COL and indicate this number in the OVERALL total no space. Compute the sum of the total items for the MCL, GAL, and ADJ/COL and indicate this number in the OVERALL total items space. Compute an overall percent error and indicate in the OVERALL % Error space.
- Review Section 2 of the Checklist. If a No response is indicated for any question, check the No space next to All 1189 computations correct? If all Yes responses are indicated, check the Yes space. If all NA responses are indicated, check the NA space.
- Review the response to question 2.4 and indicate this value in the Amount of Error on 1189 space. Be certain to circle either + or - before the number.
- Review Section 3 of the Checklist. If a No response is indicated for either question, check the No space next to All 1189-2 Computations Correct? If both Yes responses are indicated, check Yes space. If both NA responses are indicated, check the NA space.
- For each question in Section 4, check the Yes space under Timeliness if a Yes response is indicated, check the No space if a No response is indicated, and check the NA space if an NA response is indicated. Also enter the number of total working days from each question in the space marked Days.

QUALITY CONTROL CHECKLIST FOR GSL REINSURANCE: ERROR SUMMARY SHEET

Date _____

Number of Documents Sampled/
Total Number of Documents
Received:

Claims _____/
Collections _____/
Adjustments _____/
Correspondence and Other _____/
Total _____/_____

Sample Period _____/_____/_____
Month Day Year to _____/_____/_____
Month Day Year

1. Overall Error for All Logs

1.1 Percent of Cases Outside of Tolerance

_____% _____% _____% _____% _____%

1.2 Average Percent Error

_____% _____% _____% _____% _____%

1.3 Percent of All Line Items with Errors

_____% _____% _____% _____% _____%

1.4 Number of Cases Outside of Tolerance/
Total Number of Cases

_____/_____/_____/_____/_____
NA

1.5 Number of Line Items with Errors/
Total Number of Line Items

_____/_____/_____/_____/_____
NA

2. Master Control Log

2.1 Percent of Cases Outside of Tolerance

_____% _____% _____% _____% _____%

2.2 Average Percent Error

_____% _____% _____% _____% _____%

2.3 Percent of All Line Items with Errors

_____% _____% _____% _____% _____%

2.4 Number of Cases Outside of Tolerance/
Total Number of Cases

_____/_____/_____/_____/_____
NA

2.5 Number of Line Items with Errors/
Total Number of Line Items

_____/_____/_____/_____/_____
NA

B-17

	This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
3. <u>Guarantee Agency Ledger</u>					
3.1 Percent of Cases Outside of Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
3.2 Average Percent Error	_____ %	_____ %	_____ %	_____ %	_____ %
3.3 Percent of All Line Items with Errors	_____ %	_____ %	_____ %	_____ %	_____ %
3.4 Number of Cases Outside of Tolerance/ Total Number of Cases	____/____	____/____	____/____	____/____	NA
3.5 Number of Line Items with Errors/ Total Number of Line Items	____/____	____/____	____/____	____/____	NA
4. <u>Adjustments-File Maintenance Document/ Collections-Offsets Record</u>					
4.1 Percent of Cases Outside of Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
4.2 Average Percent Error	_____ %	_____ %	_____ %	_____ %	_____ %
4.3 Percent of All Line Items with Errors	_____ %	_____ %	_____ %	_____ %	_____ %
4.4 Number of Cases Outside of Tolerance/ Total Number of Cases	____/____	____/____	____/____	____/____	NA
4.5 Number of Line Items with Errors/ Total Number of Line Items	____/____	____/____	____/____	____/____	NA
5. <u>1189 Forms</u>					
5.1 Percent of 1189 Forms with Errors	_____ %	_____ %	_____ %	_____ %	_____ %
5.2 Number of 1189 Forms with Errors/ Total Number of 1189 Forms	____/____	____/____	____/____	____/____	NA

6. Claims Payment Error

6.1 Absolute Dollar Error

\$ _____ \$ _____ \$ _____ \$ _____ \$ _____

6.2 Net Dollar Error

\$ _____ \$ _____ \$ _____ \$ _____ \$ _____

6.3 Percent of Claims with Overpayments

_____ % _____ % _____ % _____ % _____ %

6.4 Percent of Claims with Underpayments

_____ % _____ % _____ % _____ % _____ %

6.5 Number of Claims with Overpayments/
Total Number of Claims

____/____ ____/____ ____/____ ____/____ ____ NA

6.6 Number of Claims with Underpayments/
Total Number of Claims

____/____ ____/____ ____/____ ____/____ ____ NA

7. 1189-2 Forms

7.1 Percent of 1189-2 Forms with Errors

_____ % _____ % _____ % _____ % _____ %

7.2 Number of 1189-2 Forms with Errors/
Total Number of 1189-2 Forms

____/____ ____/____ ____/____ ____/____ ____ NA

8. Timeliness of Processing8.1 Date SLPC Receives 1189 to Date
DPO Receives 11898.1.1 Percent of Cases Outside
Tolerance

_____ % _____ % _____ % _____ % _____ %

8.1.2 Average Number of Days
for Processing

_____ _____ _____ _____ _____

8.1.3 Number of Cases Outside
Tolerance/Total Number
of Cases

____/____ ____/____ ____/____ ____/____ ____ NA

8.2 Date DPO Receives 1189 to Date
DPO Receives Matching Reports8.2.1 Percent of Cases Outside
Tolerance8.2.2 Average Number of Days
for Processing8.2.3 Number of Cases Outside
Tolerance/Total Number
of Cases8.3 Date DPO Receives 1189 to Date
Voucher Sent to OFMS8.3.1 Percent of Cases Outside
Tolerance8.3.2 Average Number of Days
for Processing8.3.3 Number of Cases Outside
Tolerance/Total Number
of Cases8.4 Date Voucher Sent to OFMS to
Payment Certification Date8.4.1 Percent of Cases Outside
Tolerance8.4.2 Average Number of Days
for Processing8.4.3 Number of Cases Outside
Tolerance/Total Number
of Cases

This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
_____ %	_____ %	_____ %	_____ %	_____ %
_____	_____	_____	_____	_____
____/____	____/____	____/____	____/____	NA
_____ %	_____ %	_____ %	_____ %	_____ %
_____	_____	_____	_____	_____
____/____	____/____	____/____	____/____	NA
_____ %	_____ %	_____ %	_____ %	_____ %
_____	_____	_____	_____	_____
____/____	____/____	____/____	____/____	NA

	This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
8.5 Date SLPC Receives 1189 to Processing Completion Date					
8.5.1 Percent of Cases Outside Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
8.5.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.5.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	____ NA ____
8.6 Date DPO Receives 1189 to Date Collection Action Begins					
8.6.1 Percent of Cases Outside Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
8.6.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.6.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	____ NA ____

QUALITY CONTROL CHECKLIST FOR GSL REINSURANCE: INDIVIDUAL CLERK ERROR SUMMARY SHEET

Date _____

Number of Documents: _____

Claims _____

Collections _____

Adjustments _____

Correspondence and Other _____

Total _____

Sample Period / / to / /
 Month Day Year Month Day Year

Clerk's Initials _____

1. Overall Error for All Logs

	This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
1.1 Percent of Cases Outside of Tolerance	_____%	_____%	_____%	_____%	_____%
1.2 Average Percent Error	_____%	_____%	_____%	_____%	_____%
1.3 Percent of All Line Items with Errors	_____%	_____%	_____%	_____%	_____%
1.4 Number of Cases Outside of Tolerance/ Total Number of Cases	____/____	____/____	____/____	____/____	NA
1.5 Number of Line Items with Errors/ Total Number of Line Items	____/____	____/____	____/____	____/____	NA

2. Master Control Log

2.1 Percent of Cases Outside of Tolerance	_____%	_____%	_____%	_____%	_____%
2.2 Average Percent Error	_____%	_____%	_____%	_____%	_____%
2.3 Percent of All Line Items with Errors	_____%	_____%	_____%	_____%	_____%
2.4 Number of Cases Outside of Tolerance/ Total Number of Cases	____/____	____/____	____/____	____/____	NA
2.5 Number of Line Items with Errors/ Total Number of Line Items	____/____	____/____	____/____	____/____	NA

B-22

	This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
3. <u>Guarantee Agency Ledger</u>					
3.1 Percent of Cases Outside of Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
3.2 Average Percent Error	_____ %	_____ %	_____ %	_____ %	_____ %
3.3 Percent of All Line Items with Errors	_____ %	_____ %	_____ %	_____ %	_____ %
3.4 Number of Cases Outside of Tolerance/ Total Number of Cases	____/____	____/____	____/____	____/____	NA
3.5 Number of Line Items with Errors/ Total Number of Line Items	____/____	____/____	____/____	____/____	NA
4. <u>Adjustments-File Maintenance Document/ Collections-Offsets Record</u>					
4.1 Percent of Cases Outside of Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
4.2 Average Percent Error	_____ %	_____ %	_____ %	_____ %	_____ %
4.3 Percent of All Line Items with Errors	_____ %	_____ %	_____ %	_____ %	_____ %
4.4 Number of Cases Outside of Tolerance/ Total Number of Cases	____/____	____/____	____/____	____/____	NA
4.5 Number of Line Items with Errors/ Total Number of Line Items	____/____	____/____	____/____	____/____	NA
5. <u>1189 Forms</u>					
5.1 Percent of 1189 Forms with Errors	_____ %	_____ %	_____ %	_____ %	_____ %
5.2 Number of 1189 Forms with Errors/ Total Number of 1189 Forms	____/____	____/____	____/____	____/____	NA

6. Claims Payment Error

6.1 Absolute Dollar Error

\$ _____ \$ _____ \$ _____ \$ _____ \$ _____

6.2 Net Dollar Error

\$ _____ \$ _____ \$ _____ \$ _____ \$ _____

6.3 Percent of Claims with Overpayments

_____ % _____ % _____ % _____ % _____ %

6.4 Percent of Claims with Underpayments

_____ % _____ % _____ % _____ % _____ %

6.5 Number of Claims with Overpayments/
Total Number of Claims

____/____ ____/____ ____/____ ____/____ NA

6.6 Number of Claims with Underpayments/
Total Number of Claims

____/____ ____/____ ____/____ ____/____ NA

7. 1189-2 Forms

7.1 Percent of 1189-2 Forms with Errors

_____ % _____ % _____ % _____ % _____ %

7.2 Number of 1189-2 Forms with Errors/
Total Number of 1189-2 Forms

____/____ ____/____ ____/____ ____/____ NA

8. Timeliness of Processing8.1 Date SLPC Receives 1189 to Date
DPO Receives 11898.1.1 Percent of Cases Outside
Tolerance

_____ % _____ % _____ % _____ % _____ %

8.1.2 Average Number of Days
for Processing

_____ _____ _____ _____ _____

8.1.3 Number of Cases Outside
Tolerance/Total Number
of Cases

____/____ ____/____ ____/____ ____/____ NA

	This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
8.2 Date DPO Receives I189 to Date DPO Receives Matching Reports					
8.2.1 Percent of Cases Outside Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
8.2.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.2.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	NA
8.3 Date DPO Receives I189 to Date Voucher Sent to OFMS					
8.3.1 Percent of Cases Outside Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
8.3.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.3.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	NA
8.4 Date Voucher Sent to OFMS to Payment Certification Date					
8.4.1 Percent of Cases Outside Tolerance	_____ %	_____ %	_____ %	_____ %	_____ %
8.4.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.4.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	NA

	This Review Period	Last Review Period	Prior Review Period	Year to Date Average	Standard
8.5 Date SLPC Receives I189 to Processing Completion Date					
8.5.1 Percent of Cases Outside Tolerance	_____%	_____%	_____%	_____%	_____%
8.5.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.5.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	NA
8.6 Date DPO Receives I189 to Date Collection Action Begins					
8.6.1 Percent of Cases Outside Tolerance	_____%	_____%	_____%	_____%	_____%
8.6.2 Average Number of Days for Processing	_____	_____	_____	_____	_____
8.6.3 Number of Cases Outside Tolerance/Total Number of Cases	____/____	____/____	____/____	____/____	NA

**DPO QUALITY CONTROL CHECKLIST FOR GSL REINSURANCE - ERROR SUMMARY SHEET:
COMPLETION INSTRUCTIONS**

1. Overall Error for All Logs

- Compare each case's (a case is equivalent to a completed Checklist) overall percent error (indicated on the Checklist) to the DPO established standard.
- Tabulate the number of cases outside of tolerance and indicate this number and the total number of cases on line 1.4.
- Using these numbers, compute the percent of cases outside of tolerance and indicate this number on line 1.1.
- Using the overall percent error on the Checklist, calculate average percent error on line 1.2.
- Tabulate the number of line items with errors and the total number of line items and indicate these numbers on line 1.5.
- Using these numbers, compute the percent of all line items with errors and indicate this number on line 1.3.
- All computations must include an adjustment for the number of each document type received. Therefore, first, calculate all data by document type; second, weight these data by the total number of that document type received; and third, calculate an overall number based on the total number of documents received.

2. Master Control Log

- Repeat the process explained under Overall Error for All Logs.

3. Guarantee Agency Ledger

- Repeat the process explained for Overall Error for All Logs.

4. Adjustments - File Maintenance Document/Collections-Offsets Record

- Repeat the process explained for Overall Error for All Logs.

5. 1189 Forms

- Tabulate the number of 1189 forms with errors and indicate this number and the total number of 1189 forms on line 5.2.
- Using these numbers, compute the percent of 1189 forms with errors and indicate this number on line 5.1.

6. Claims Payment Error

- Calculate absolute dollar error as the sum of the absolute values of the amount of error on the 1189 and indicate this number on line 6.1.
- Calculate net dollar error as the difference between positive and negative amount of error on 1189 and indicate this number (including a + or - sign) on line 6.2.
- Calculate the number of claims with a + amount of error on 1189 and the total number of claims and indicate these numbers on line 6.5.
- Using these numbers, calculate the percent of claims with overpayments and indicate this number on line 6.3.
- Calculate the number of claims with a - amount of error on 1189 and the total number of claims and indicate these numbers on line 6.6.
- Using these numbers, calculate the percent of claims with underpayments and indicate this number on line 6.4.

7. 1189-2 Forms

- Tabulate the number of 1189-2 forms with errors and indicate this number and the total number of 1189-2 forms on line 7.2.
- Using these numbers, compute the percent of 1189-2 forms with errors and indicate this number on line 7.1.

8. Timeliness of Processing

- Compute the total number of cases outside tolerance from the no space on line 4.1 of the Checklist and indicate this number and the total number of cases (sum of the numbers in the yes and no spaces from line 4.1 of the checklist) on line 8.1.3.
- Using these numbers, compute the percent of cases outside of tolerance and indicate this number on line 8.1.1. Compute the average number of days for processing using the numbers in the days space on line 4.1 of the Checklist and indicate this number on line 8.1.2.
- Repeat this process for all categories in Section 8 of the Error Summary Sheet using line 4.2 through line 4.6 of the Checklist.